

# IMIDAN® 70-WP

Agricultural Insecticide  
Wettable Powder--For Multi-Crop Pest Control

<b>Active Ingredient:</b> Phosmet: N-(Mercaptomethyl)	<b>% By Wt.</b>
phthalimide, S-(O,O-dimethyl phosphorodithioate) .....	70%
<b>Inert Ingredients:</b> .....	30%
	<b>Total 100%</b>

### KEEP OUT OF REACH OF CHILDREN WARNING-AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### STATEMENT OF PRACTICAL TREATMENT Organophosphate Insecticide

Call a Poison Control 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:** Exposure 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.

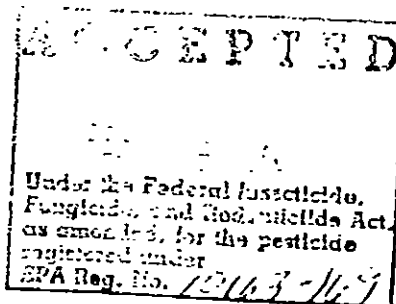
**IF ON SKIN:** Flush all affected areas with plenty of water for several minutes. Seek medical attention if skin irritation occurs.

**IF IN EYES:** Hold eyelids apart and flush eyes with plenty of water. Get medical attention if irritation persists.

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

NET WEIGHT \_\_\_\_\_ LBS.

EPA Reg. No. 10163-169  
EPA Est No 675-45-AZ-1



Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366

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

May be fatal if swallowed, inhaled, or absorbed through the skin. Do not breathe dust or spray mist. Do not get in eyes, on skin, or on clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

*Applicators and other handlers must wear:*

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure
- Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS**

*Users should:*

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. 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 70-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 70-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.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

#### 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 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.

##### 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 the surface of water in a nearly filled spray tank. Add balance of water to fill the tank. Keep agitator running during filling and spraying operations. Do not allow mixture to stand.

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### USE LIMITATIONS

Do not exceed the maximum rate of Imidan 70-WP per acre or the time limitations specified for the individual crops.

### 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 section entitled GENERAL CHEMIGATION INSTRUCTIONS for specific directions for use.

### RECOMMENDATIONS FRUIT AND NUT CROPS

**NOTE:** Imidan 70-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 70-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 4 1/3 lbs. per acre. Limit use on bearing almonds to one foliar application per season. Do not apply within 30 days of harvest.

**APPLES (EAST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Elm Spanworm, European Corn Borer, European Sawfly, Fruittree Leafroller, Green Fruitworm, Gypsy Moth, Japanese Beetle, Obliquebanded Leafroller\*, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Redhumped Caterpillar, and San Jose Scale; Use 2 1/8 to 5 1/3 lbs. per acre (or 3/4 to 1 lb. per 100 gals. not to exceed 5 1/3 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply more than 30 lbs. per acre per crop season. 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.

**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 70-WP and methomyl (Lannate\*) may be used as follows: Mix 1/3 to 2/3 lb. of Imidan 70-WP plus 1/2 to 1 pt. of methomyl 1.8 L or 2 to 4 ozs. of methomyl 90% S.P. per 100 gals. of water. Apply as a full cover spray using up to 400 gals. per acre. Repeat as necessary in accordance with insect infestations, and local and 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. Do not apply more than 30 lbs. per acre of Imidan 70-WP per crop season. \*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 Sawfly, Green Apple Aphid, Japanese Beetle, Orange Tortrix, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Redhumped Caterpillar, Rosy Apple Aphid and San Jose Scale,

Use 3 1/2 to 5 1/3 lbs. per acre per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and State spray programs. Do not apply more than 30 lbs. per acre per crop season. 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 Redbanded Leafroller; Use 2 1/8 to 4 1/4 lbs. per acre (or 3/4 to 1 lb. per 100 gals. not to exceed 4 1/4 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and 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.

**APRICOTS (WEST OF THE ROCKIES):** For control of Apple Maggot, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, and Redbanded Leafroller; Use 4 1/4 lbs. per acre per application. Repeat as necessary in accordance with insect infestations and local and State spray programs. Do not apply within 14 days of harvest.

**BLUEBERRIES (NORTHEASTERN U.S. ONLY):** For control of Blueberry Maggot, Cherry Fruitworm, Cranberry Fruitworm, Japanese Beetle, Plum Curculio, Obliquebanded Leafroller, Redbanded Leafroller; Use 1 1/3 lbs. per acre as a foliar spray in a minimum of 2 gallons of water by aircraft. 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, Fruittree Leafroller, Japanese Beetle, Peach Twig Borer, Plum Curculio, and San Jose Scale; Use 2 1/8 to 2 1/2 lbs. per acre (or 3/4 lb. per 100 gals. not to exceed 2 1/2 lbs. per acre) per application. Repeat as necessary in accordance with insect infestations and local and 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.

**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 1 1/3 to 2 1/8 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 Grape Berry Moth). Use higher rates for control of Japanese beetle. Spray both sides of each row, and 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 and State programs. Do not apply within 14 days of harvest.

**GRAPES (WEST):** For control of Grape Leafroller, Omnivorous Leafroller, and Western Grapeleaf Skeletonizer; Use 1 1/3 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 leafroller, leafroller, and Western grapeleaf 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 Redbanded Leafroller; Use 2 1/8 to 4 1/4 lbs. per acre (or 3/4 to 1 lb. per 100 gals. not to exceed 4 1/4 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and 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 70-WP on late maturing nectarine varieties as fruit injury may result.

\* Omite is a registered trademark of Uniroyal Chemical.

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**NECTARINES (WEST OF THE ROCKIES):** For control of Apple Maggot, early season Climbing Cutworms, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, and Redbanded Leafroller; Use 4 1/4 lbs. per acre per application. Repeat as necessary in accordance with insect infestations and local and State spray programs. Do not apply within 14 days of harvest. Do not use Omite\* in combination with Imidan 70-WP on late maturing nectarine varieties as fruit injury may result. (In California, the reentry interval is 5 days).

\* 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 2 1/8 to 4 1/4 lbs. per acre (or 3/4 to 1 lb. per 100 gals. not to exceed 4 1/4 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply more than 17 lbs. per acre per crop season. Do not apply within 14 days of harvest.

**PEACHES (WEST OF THE ROCKIES):** For control of early season Climbing Cutworms, Japanese Beetle, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, and Plum Curculio; Use 4 1/4 lbs. per acre per application. Repeat as necessary in accordance with insect infestations and local and State spray programs. Do not apply more than 17 lbs. per acre per crop season. Do not apply within 14 days of harvest. (In California, the reentry interval is 5 days)

**PEARS (EAST OF THE ROCKIES):** For control of Codling Moth, Elm Spanworm, Fruittree Leafroller, Gypsy Moth, Plum Curculio, and Redbanded Leafroller; Use 2 1/8 to 7 1/8 lbs. per acre (or 3/4 to 1 lb. per 100 gals. not to exceed 7 1/8 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and 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.

**PEARS (WEST OF THE ROCKIES):** For control of Codling Moth, Elm Spanworm, Fruittree Leafroller, Gypsy Moth, Pear Psylla, Plum Curculio, and Redbanded Leafroller; Use 3 1/2 to 7 1/8 lbs. per acre per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and State spray programs. Do not apply within 7 days of harvest

**PECANS:** For control of Pecan Nut Casebearer, Pecan Weevil\*\*, and Hickory Shuckworm; Use 3 1/8 lbs. per acre (or 1 lb. per 100 gals. not to exceed 3 1/8 lbs. per acre) applied when infestations start. 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 or feed livestock on cover crops grown in treated pecan groves.

\*\*For control of low to moderate populations of pecan weevils; adequate control may not be achieved when heavy populations are present.

**PLUMS, PRUNES (EAST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redhumped Caterpillar and Redbanded Leafroller; Use 2 1/8 to 4 1/4 lbs. per acre (or 3/4 to 1 lb. per 100 gals. not to exceed 4 1/4 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and 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

**PLUMS, PRUNES (WEST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redhumped Caterpillar and Redbanded Leafroller; Use 3 1/2 to 4 1/4 lbs. per acre per application.

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insect infestations and local and 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 lb. of Imidan 70-WP per acre in a minimum of 10 gals. of water by ground equipment (20 gals. for dense stands) or 5 gals. 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 pineolene based adjuvants or any agricultural sticker or extender.

\*For application by irrigation system: Apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label.

For Pea Aphid, apply the recommended rate of Imidan 70-WP in combination with 1/3 to 2/3 pt. of 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 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 and NEVADA):** For control of Common and Egyptian Alfalfa Weevil larvae and adults, Potato Leafhopper\*, Meadow Spittlebug, and Alfalfa Blotch Leafminer; Use 1 1/3 lbs. per acre in a minimum of 10 gals. of water by ground equipment (20 gals. for dense stands) or a minimum of 2 gals. 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 application by irrigation system: Apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label.

For Pea Aphid, apply the recommended rate of Imidan 70-WP in combination with 1/3 to 2/3 pt. of 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.

**COTTON (EXCEPT SAN JOAQUIN VALLEY, CA):** For control of overwintering generation of Boll Weevil; apply 1/3 to 3/4 lb. per acre in a minimum of 5 gals. of water by ground equipment or apply 3/4 lb. per acre in a minimum of 3 gals. of water by aircraft. Make 2 applications. The first application should be made at the 1/3 grown square stage and the second 5 to 7 days later. Use the higher rate under heavy infestations. For control of first, second or third generation Boll Weevils, apply 1 to 1 1/3 lbs. Imidan 70-WP in the same amount of water as specified above. Make applications at intervals from 3 to 7 days depending upon weevil population and weevil migration in fields. Use the higher rates for heavy infestations. Check infestations regularly. Do not exceed 14 lbs. of Imidan 70-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 Covich and Clairborne Counties, MS; Lauderdale and Madison Counties, AL; and Lawrence

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County TN. Do not apply within one mile of 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 to 1 1/3 lbs. per acre in a minimum of 5 gals. of water per acre by aircraft or 20 gals. 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 1 1/3 lbs. per acre in sufficient water to provide good coverage. Repeat applications as necessary throughout the growing season. Use only on potatoes to be harvested by machine. Not recommended for use on potatoes in California. Do not apply within 7 days of harvest.

\*For application by irrigation systems; Apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label.

**FIELD MARGINS:** For control of Grasshoppers in margins of cultivated fields and forage crop sites listed on this label, apply 2 1/8 to 2 3/4 lbs. Imidan 70-WP in 10 to 50 gals. of water per acre (20 to 50 gals. in dense stands) by ground equipment or in 5 to 10 gals. 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 70-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 infestation of Gypsy Moth, Spring Cankerworm, Elm Spanworm, Birch Leafminer, 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 3/4 to 1 lb. per 100 gals. of water thoroughly wetting all parts of the affected plants to the point of runoff. For heavy 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, Dogwood, Oak, Willow, Hickory, Locust, Liquidambar, Hawthorne, Birch, Elm and 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, and Yew) to control Gypsy Moth.

- Recommended on Birch Trees to control; Birch Leafminer.

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

**CHRISTMAS TREE PLANTATIONS:** For control of Sawfly species, Scale 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 1 1/3 lbs. per acre in sufficient water to achieve thorough and complete coverage through aerial or ground application equipment. Apply when pest populations reach economic threshold levels as determined by the local Extension Service, Forest Service, or other monitoring system.

**PINE TREES (PACIFIC NORTHWEST ONLY):** For control of European Pine Shoot Moth (*Rhyacionia buoliana*), Use 1 1/3 lbs. Imidan 70-WP per acre or for individual trees at a rate of 1



1/3 lbs. per 100 gals. 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 (*Pachylobius picivorus*); Use Imidan 70-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 70-WP on the foliage under high rainfall conditions. Some slight needle burn and first year growth reduction may occur on treatment of loblolly pine.

\* Nu-Film 17 is a registered trademark of the Miller Chemical and Fertilizer Corp.

**DILUTION TABLE FOR 4% TOP DIP**

TO MAKE	5 GALS.	30 GALS.	50 GALS.	100 GALS.
Use this amount of Imidan 70-WP	2 1/2 lbs.	14 lbs.	24 lbs.	48 lbs.

Agitate frequently to keep Imidan 70-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.

### 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.

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.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. 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 70-WP through any irrigation system supplied by a public water system unless the water supplied 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 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 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, or traveling gun types of equipment: Inject into the system for one revolution or run. Shut off injection equipment after one revolution or run, but

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continue to operate irrigation system until Imidan 70-WP has been cleared from the 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 70-WP over a 30-60 minute period. Shut off injection equipment. Continue to operate irrigation system until Imidan 70-WP has been cleared from the last sprinkler head. Imidan 70-WP can be injected at the end of the irrigation cycle, or as a separate application. Do not use end guns.

Imidan 70-WP must be premixed in a supply tank with water and other appropriate tank-mix 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 8 hours and the Imidan 70-WP is pre-mixed in the supply tank, the tank-mix must be buffered to a pH of at least 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 runoff 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 injection 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, or 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 70-WP has been cleared from the 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 70-WP over a 30-60 minute period. Shut off injection equipment. Continue to operate irrigation system until Imidan 70-WP has been cleared from the last sprinkler head. Imidan 70-WP can be injected at the end of the irrigation cycle, or as a separate application. Do not use end guns.

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Imidan 70-WP must be premixed in a supply tank with water and other appropriate tank-mix 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 8 hours and the Imidan 70-WP is pre-mixed in the supply tank, the tank-mix must be buffered to a pH of at least 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 runoff can be permitted during chemigation.

#### 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 and 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.

#### NOTICE ON CONDITIONS OF SALE

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 practices. The buyer assumes all responsibility including injury or damage, resulting from its misuse as such, or in combination with other materials.

Imidan® is a registered trademark of ZENECA Inc.

Rev. BH-eps-9.2595

**BEST COPY AVAILABLE**

PM 13 10163-166

# IMIDAN® 50-WP

**Agricultural Insecticide**  
**Wettable Powder—For Multi-Crop Pest Control**

<b>Active Ingredient:</b> Phosmet: N-(Mercaptomethyl)	<b>% By Wt.</b>
phthalimide, S-(O,O-dimethyl phosphorodithioate) .....	50%
<b>Inert Ingredients:</b> .....	<u>50%</u>
	<b>Total 100%</b>

### KEEP OUT OF REACH OF CHILDREN WARNING-AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### STATEMENT OF PRACTICAL TREATMENT Organophosphate Insecticide

Call a Poison Control 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:** Exposure 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.

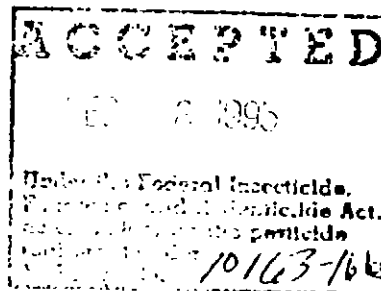
**IF ON SKIN:** Flush all affected areas with plenty of water for several minutes. Seek medical attention if skin irritation occurs.

**IF IN EYES:** Hold eyelids apart and flush eyes with plenty of water. Get medical attention if irritation persists.

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

NET WEIGHT \_\_\_\_\_ LBS.

EPA Reg. No. 10163-166  
EPA Est. No. 67545-AZ-1



Gowan Company  
P.O. Box 5569  
Yuma, AZ, 85366

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

May be fatal if swallowed, inhaled, or absorbed through the skin. Do not breathe dust or spray mist. Do not get in eyes, on skin, or on clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

*Applicators and other handlers must wear:*

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure
- Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS**

*Users should:*

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. 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.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

#### 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 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.

##### 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 the surface of water in a nearly filled spray tank. Add balance of water to fill the 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 a minimum of 4 pounds of Imidan 50-WP per acre on mature Pome and Stone Fruit Trees (3 1/2 pounds per acre 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 section 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. Limit use on bearing almonds to one foliar application per season. Do not apply within 30 days of harvest.

**APPLES (EAST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Elm Spanworm, European Corn Borer, European Sawfly, Fruittree Leafroller, Green Fruitworm, Gypsy Moth, Japanese Beetle, Obliquebanded Leafroller\*, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Redhumped Caterpillar, and San Jose Scale; Use 3 to 8 lbs. per acre (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 8 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply more than 42 lbs. per acre per crop season. 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.

**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 1.8 L or 2 to 4 ozs. of methomyl 90% S.P. per 100 gals. of water. Apply as a full cover spray using up to 400 gals. per acre. Repeat as necessary in accordance with insect infestations



and local and 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. Do not apply more than 42 lbs. per acre of Imidan 50-WP per crop season. \*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 Sawfly, Green Apple Aphid, Japanese Beetle, Orange Tortrix, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Redhumped Caterpillar, Rosy Apple Aphid and San Jose Scale; Use 5 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 and State spray programs. Do not apply more than 42 lbs. per acre per crop season. 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 Redbanded Leafroller; Use 3 to 6 lbs. per acre (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and 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.

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

**BLUEBERRIES (NORTHEASTERN U.S. ONLY):** For control of Blueberry Maggot, Cherry Fruitworm, Cranberry Fruitworm, Japanese Beetle, Plum Curculio, Obliquebanded Leafroller, Redbanded Leafroller; Use 2 lbs. per acre as a foliar spray in a minimum of 2 gallons of water by aircraft. 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, Fruittree Leafroller, Japanese Beetle, Peach Twig Borer, Plum Curculio, and San Jose Scale; Use 3 to 3 1/2 lbs. per acre (or 1 lb. per 100 gals. not to exceed 3 1/2 lbs. per acre) per application. Repeat as necessary in accordance with insect infestations and local and 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.

**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 Grape Berry Moth). Use higher rates for control of Japanese beetle. Spray both sides of each row, and 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 and State programs. Do not apply within 14 days of harvest.

**GRAPES (WEST):** For control of Grape Leafroller, Omnivorous Leafroller, and Western Grapeleaf 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 leafroller, leafroller, and Western grapeleaf 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 Redbanded Leafroller; Use 3 to 6 lbs. per acre (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations

and local and 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.

**NECTARINES (WEST OF THE ROCKIES):** For control of Apple Maggot, early season Climbing Cutworms, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, and Redbanded Leafroller; Use 6 lbs. per acre per application. Repeat as necessary in accordance with insect infestations and local and 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. (In California, the reentry interval is 5 days)

\* 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 (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply more than 24 lbs. per acre per crop season. Do not apply within 14 days of harvest.

**PEACHES (WEST OF THE ROCKIES):** For control of early season Climbing Cutworms, Japanese Beetle, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, and Plum Curculio; Use 6 lbs. per acre per application. Repeat as necessary in accordance with insect infestations and local and State spray programs. Do not apply more than 24 lbs. per acre per crop season. Do not apply within 14 days of harvest. (In California, the reentry interval is 5 days)

**PEARS (EAST OF THE ROCKIES):** For control of Codling Moth, Elm Spanworm, Fruittree Leafroller, Gypsy Moth, Plum Curculio, and Redbanded Leafroller; Use 3 to 10 lbs. per acre (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 10 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and 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.

**PEARS (WEST OF THE ROCKIES):** For control of Codling Moth, Elm Spanworm, Fruittree Leafroller, Gypsy Moth, Pear Psylla, Plum Curculio, and Redbanded Leafroller; Use 5 to 10 lbs. per acre per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and State spray 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 (or 1 1/2 lbs. per 100 gals. not to exceed 4 1/2 lbs. per acre) applied when infestations start. 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 or feed livestock on cover crops grown in treated pecan groves.

\*\*For control of low to moderate populations of pecan weevils; adequate control may not be achieved when heavy populations are present.

**PLUMS, PRUNES (EAST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redhumped Caterpillar and Redbanded Leafroller; Use 3 to 6 lbs. per acre (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre) per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local and 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.

**PLUMS, PRUNES (WEST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redhumped Caterpillar and Redbanded Leafroller; 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 and 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 gals. of water by ground equipment (20 gals. for dense stands) or 5 gals. 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 pineolene based adjuvants or any agricultural sticker or extender.

\*For application by irrigation system: Apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label.

For Pea Aphid, apply the recommended rate of Imidan 50-WP in combination with 1/3 to 2/3 pt. of 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 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 and 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 a minimum of 10 gals. of water by ground equipment (20 gals. for dense stands) or a minimum of 2 gals. 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 application by irrigation system: Apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label.

For Pea Aphid, apply the recommended rate of Imidan 50-WP in combination with 1/3 to 2/3 pt. of 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.

**COTTON (EXCEPT SAN JOAQUIN VALLEY, CA):** For control of overwintering generation of Boll Weevil; apply 1/2 to 1 lb. per acre in a minimum of 5 gals. of water by ground equipment or apply 1 lb. per acre in a minimum of 3 gals. of water by aircraft. Make 2 applications. The first application should be made at the 1/3 grown square stage and the second 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 from 3 to 7 days depending upon weevil

population and weevil migration in fields. Use the higher rates 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 Covich and Clairborne Counties, MS; Lauderdale and Madison Counties, AL; and Lawrence County TN. Do not apply within one mile of 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 gals. of water per acre by aircraft or 20 gals. 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. Use only on potatoes to be harvested by machine. Not recommended for use on potatoes in California. Do not apply within 7 days of harvest.

\*For application by irrigation systems; Apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label.

**FIELD MARGINS:** For control of Grasshoppers in margins of cultivated fields and forage crop sites listed on this label, apply 3 to 4 lbs. Imidan 50-WP in 10 to 50 gals. of water per acre (20 to 50 gals. in dense stands) by ground equipment or in 5 to 10 gals. 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 infestation of Gypsy Moth, Spring Cankerworm, Elm Spanworm, Birch Leafminer, 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 lbs. per 100 gals. of water thoroughly wetting all parts of the affected plants to the point of runoff. For heavy 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, Dogwood, Oak, Willow, Hickory, Locust, Liquidambar, Hawthorne, Birch, Elm and 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, and Yew) to control Gypsy Moth.

- Recommended on Birch Trees to control: Birch Leafminer.

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

**CHRISTMAS TREE PLANTATIONS:** For control of Sawfly species, Scale 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 aerial or ground application

equipment. Apply when pest populations reach economic threshold levels as determined by the local Extension Service, Forest Service, or other monitoring system.

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

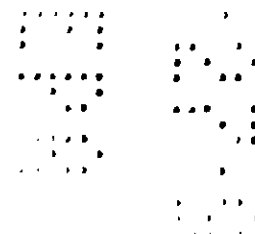
**PINE SEEDLINGS (WHITE, SLASH and LOBLOLLY):** For control of Pales Weevil (*Hylobius pales*) and Pitch Eating Weevil (*Pachylobius picivorus*); Use Imidan 50-WP as a 4 % top dip, dipping down to and including root collar only. Dip in bundles loose enough to allow solution to penetrate the bundles. 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 reduction may occur on treatment of loblolly pine.

\* Nu-Film 17 is a registered trademark of the Miller Chemical and Fertilizer Corp.

**DILUTION TABLE FOR 4% TOP DIP**

TO MAKE	5 GALS.	30 GALS.	50 GALS.	100 GALS.
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.



### 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.

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.

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

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### 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 supplied 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 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 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, or 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 the 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 30-60 minute period. Shut off injection equipment. Continue to operate irrigation system until Imidan 50-WP has been cleared from the last sprinkler head. Imidan 50-WP can be injected at the end of the 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-mix 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 8 hours and the Imidan 50-WP is pre-mixed in the supply tank, the tank-mix must be buffered to a pH of at least 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 runoff 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 injection 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, or 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 the last sprinkler head. Do not use end guns. The system should be run at maximum speed for a foliar application.

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#### **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 and 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.

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#### **NOTICE ON CONDITIONS OF SALE**

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 practices. The buyer assumes all responsibility including injury or damage, resulting from its misuse as such, or in combination with other materials.

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