

10163-175

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

January 27, 2010

Julie Butcher, Registration Specialist
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

Subject: Label Amendment for the Agency's Interim Risk Mitigation for Phosmet Products
Product Name: IMIDAN® 50-WSB Agricultural Insecticide
EPA Reg. No.: 10163-175
Application Dated: March 30, 2007
Decision Number: 325621

Dear Ms. Butcher:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable subject to the comments listed below.

This label amendment reflects the Agency's interim risk reduction recommendations for phosmet. The Agency remains concerned, however, that the calculated margins of exposure for phosmet are low for some crops/uses at the labeled REIs. Although EPA is accepting the amended labels for phosmet products labeled for these uses at this time, the Agency will reassess the risks and agricultural benefits of phosmet uses as part of the registration review process, and may determine that additional mitigation measures, such as longer REIs, are needed.

Make the following label revisions:

1. Add a resistance management identifier "GROUP 1B INSECTICIDE" after the ingredient statement, and revise the existing "**RESISTANCE MANAGEMENT**" statement within the **DIRECTIONS FOR USE**, following the guidelines of EPA Pesticide Registration Notice 2001-5. Such a statement should include information on development of pest resistance, recommendations for chemical rotation between different chemical classes, and information on how to report suspected instances of observed pesticide resistance to local or state agricultural authorities.
2. Based on toxicity rankings from the acute toxicity review, re-order the **FIRST AID** statements as follows:

"FIRST AID
Organophosphate

IF SWALLOWED: Immediately call a poison control center or doctor. Do not induce vomiting unless told to by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.”

Also, the **IF INHALED** statement may be retained if desired, but should be listed last among the first aid statements.

- 3. Revise the **HAZARDS TO HUMANS AND DOMESTIC ANIMALS** statement as follows:

“WARNING-AVISO

May be fatal if swallowed. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. Causes moderate eye irritation.

- 4. Revise the **USE PRECAUTIONS** statement by adding the following: “Use in residential, park, or recreational areas is prohibited.”

- 5. Add the following to the beginning of the **SPRAY DRIFT MANAGEMENT** statement:

“Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.”

Also, revise the ‘**For overhead chemigation:**’, ‘**For ground boom applications:**’, ‘**For airblast applications:**’ and ‘**For aerial applications:**’ statements by deleting “when wind speed is 10 mph or less” and replacing with “when wind speed is 3 – 10 mph”.

Also add a **SPRAY DRIFT RESTRICTIONS** statement as follows:

“SPRAY DRIFT RESTRICTIONS

Do not apply this product in a manner inconsistent with the Best Management Practices summarized below.

- 1. Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.
- 2. For aerial applications, release spray at the lowest height consistent with efficacy and flight safety. For applications other than those on potatoes, if the application site is

within 50 feet of a permanent water body, do not release spray at a height greater than 10 feet above the ground or crop canopy. For applications to potatoes, if the application site is within 150 feet of a permanent water body, do not release spray at a height greater than 10 feet above the ground or crop canopy.

3. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.
4. Make aerial or ground applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is 3 to 10 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
5. Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
6. Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.
7. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
8. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.
9. For ground-boom, chemigation, orchard, or other airblast applications, do not apply within 25 feet of permanent water bodies (rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries, or commercial fish ponds).
10. For aerial application to crops other than potatoes, do not apply within 50 feet of permanent water bodies. For aerial applications to potatoes, do not apply within 150 feet of permanent water bodies.

6. Revise the **USE LIMITATIONS** statement to read “Do not exceed the maximum rate of phosmet per acre or the time limitations specified for the individual crops.”

Also, add the following statement: “Use in residential, park, or recreational areas is prohibited. Imidan 50-WSB is only for use in commercial agricultural crops and areas as listed. Do not apply to forests or natural fallow or wooded areas.”

7. For all expressions of rate usage limitations in the **DIRECTIONS FOR USE** and elsewhere (both *seasonal* and *per application* limitations), rates must be expressed in both the amount of product per acre and also parenthetically as pounds a.i. per acre. For example, on CROP X, revise a typical “USE RATE” to read “2.5 lbs (1.25 lb ai)”. This dual verbiage must be applied to all expressions of use rate limitations to prevent use of alternate phosmet formulations/products in a way that exceeds a.i. limitations outlined in the phosmet RED.
9. In the use directions for Apples, delete the 3rd bullet pointed direction “Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days.” This statement contradicts the correct REIs that are placed in the first two bullet points for apples East of the Rockies and West of the Rockies, respectively.

Also, revise the instructions for apples to include use direction for tank mixes with methomyl (Northeastern United States Only). For tank mixing with methomyl, the maximum application rate is 4 lbs per acre (2 lbs ai). The pre-harvest interval is 14 days when tank mixed with methomyl. The REI remains unchanged for this tank mix, but may be superseded by the REI for methomyl products. The registrant has the option to make this revision by adding a separate crop directions section entitled "Apples—tank mix with methomyl (Lannate) (Northeast only)". All other restrictions and use directions must be retained.

- 10. Revise the use directions for lowbush blueberries by revising the maximum seasonal (yearly) amount of Imidan to 7.2 lbs/acre (3.6 lbs ai), as listed in the Agency's RED. The current label is incorrectly showing 10 lbs/acre per year, which is a rate only allowed for highbush blueberries.
- 11. Revise the maximum single application rate for Cherries (sour/tart) to 3 lbs per acre (1.5 lbs ai), as listed in the Agency's RED.
- 12. Revise the use directions for the pine seedlings (dip application) by deleting the statements "Do not make more than 3 applications per year" and "Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 13 days." These statements are only for applications to conifer plantings outdoors and do not apply to the seedling dip application.
- 13. Revise the following sections of the **STORAGE AND DISPOSAL** statement:

Revise the **STORAGE** statement as follows:

"PESTICIDE STORAGE: Store in a cool, dry place. Always store pesticides in the original container. If a leaky container must be contained within another, mark the outer container to identify the contents. The storage area must be dry, well-lit, and well-ventilated. Keep pesticide storage areas clean. Clean up spills promptly. Store Pesticides away from food, feed, seed, and fertilizers."

Also, revise the **PESTICIDE DISPOSAL** statement as follows:

"PESTICIDE DISPOSAL: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry)."

- 14. Revise the **WARRANTY STATEMENT** as follows:

In the third paragraph, revise the last sentence as follows: "TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED"

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In the last paragraph, revise to read: "TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY'S EXCLUSIVE . . ."

Two copies of the finished labeling must be submitted prior to releasing the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. If you have any questions, you may contact Clayton T. Myers, at (703) 347-8874.

Sincerely,



Richard Gebken
Product Manager 10
Insecticide Branch
Registration Division (7505P)

Enclosure

ACCEPTED
with COMMENTS
In EPA Letter Dated
JAN 27 2010
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
10163-175

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IMIDAN® 50-WSB

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

ACTIVE INGREDIENT: Phosmet	% By Wt.
N-(Mercaptomethyl) phthalimide, S-(O,O-dimethyl phosphorodithioate	50.0%
OTHER INGREDIENTS	50.0%
	TOTAL 100.0%

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.)

FIRST AID ORGANOPHOSPHATE	
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor • Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.	

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)

Some materials that are chemical-resistant to this product are barrier laminate and viton. If you want more options, follow the instructions for category H on an EPA chemical-resistance category selection chart.

Mixers, loaders, and applicators using engineering controls, including enclosed-cockpit aerial equipment and enclosed-cab ground equipment, and mixers, loaders, and applicators using handheld equipment or handheld nozzles must wear at least (see engineering control section of this labeling for more requirements and options):

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves when mixing and loading, and when applying with handheld equipment or handheld nozzles, and
- Chemical-resistant apron when mixing and loading.

Motorized ground equipment applicators not in an enclosed cab, applicators dipping pine seedlings, and handlers engaged in cleaning up a spill or leak, or cleaning or repairing contaminated equipment, must wear:

- Coveralls over long-sleeve shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposure,
- Chemical-resistant apron, if exposed to the concentrate or applying as a pine seedling dip, and
- A respirator with an organic-vapor cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any N, R or P or He prefilter.

See Engineering Controls for additional requirements and options.

NET CONTENTS _____ LBS.



Produced For:
Gowan Company
PO Box 5569
Yuma, AZ 85366-5569

EPA Reg. No. 10163-175
EPA Est. No. 67545-AZ-1

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENGINEERING CONTROLS

Engineering Controls for Mixers and Loaders:

Water-soluble packets when used correctly qualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40CFR 170.240(d)(4)].

Mixers and loaders using water-soluble packets must:

- Wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders using engineering controls, and
- Be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown:
 1. Chemical-resistant footwear, and
 2. A respirator of the type specified in the PPE section of this labeling.

Engineering Controls for Applicators using Enclosed Cab Motorized Ground Equipment:

When applicators use motorized groundboom or airblast equipment with an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection, they must:

- Wear the PPE specified on this labeling for applicators using enclosed cabs, and
- Either wear a respirator of the type specified in the PPE section of this labeling OR use an enclosed cab that is declared in writing by the manufacturer or by a government agency to provide at least as much respiratory protection as the respirator specified above,
- Be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area:
 1. Coveralls,
 2. Chemical-resistant gloves,
 3. Chemical-resistant footwear,
 4. Chemical-resistant headgear if overhead exposure, and
 5. If using an enclosed cab that provides respiratory protection, a respirator of the type specified in the PPE section of this labeling.
- Take off any PPE that was worn in the treated area before reentering the cab, and
- Store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

Engineering Controls for Aerial Applications:

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(6)]. Human flagging is prohibited.

ENVIRONMENTAL HAZARDS

This chemical can contaminate surface water through aerial and ground spray applications. Under some conditions, it may also have a high potential for runoff into surface water after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is highly toxic to bees exposed directly to application residues on crops. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Protective information may be obtained from your Cooperative Agricultural Extension Service.

USE PRECAUTIONS

Read all precautions and directions before using. Apply this product only as specified on this label.

Imidan 50-WSB 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-WSB.

Insecticidal activity may also be reduced when the spray solution has a pH of 6 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.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making applications.

For overhead chemigation:

Apply only when wind speed is 10 mph or less.

For ground boom applications:

Apply with nozzle height no more than 2 feet above the ground or crop canopy, and when the wind speed is 10 mph or less at the application site as measured by an anemometer. Use a coarse or coarser spray (ASABE definition S572) for standard nozzles, or a volume mean diameter (VMD) of 385 microns or greater for spinning atomizer nozzles.

For airblast applications:

Do not direct spray above crop canopy and turn off outward pointing nozzles at row ends and when spraying outer two rows. Apply only when wind speed is 10 mph or less at the application site as measured by an anemometer.

For aerial applications:

If the application includes a no-spray buffer zone, do not release spray at a height greater than 10 feet above the ground or crop canopy. Apply only when the wind speed is 10 mph or less. Use a coarse or coarser spray (ASABE definition S572) for standard nozzles, or a volume mean diameter (VMD) of 385 microns or greater for spinning atomizer nozzles. Aerial applicators must consider flight speed and nozzle orientation in determining droplet size. The boom width must not exceed 75% of the wingspan or 90% of the rotary blade. When applications are made with a cross wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application by adjusting the path of the aircraft upwind.

The applicator also must use all other measures to control drift.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. Not for use in residential areas.

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 enter or allow entry into treated areas during the restricted entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop.

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
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant headgear for overhead exposure

DILUTION DIRECTIONS

The rate required for thorough, uniform coverage varies with plant growth at time of application. Apply recommended rate in adequate spray volumes to provide complete coverage of fruit and foliage.

- For aerial applications, apply in a minimum of 2 gals. of water per acre for field and row crops, and a minimum of 5 gals. of water per acre for tree and vine crops unless otherwise specified in the recommendation for a specific crop.

MIXING DIRECTIONS

Please read and observe the following directions for use:

- Packets containing Imidan 50-WSB are water soluble. Avoid exposing inner bags to moisture.
- Do not allow bags to become wet prior to adding to the spray tank.
- Do not handle inner bag with wet hands.
- Reseal outer bag in a manner that protects remaining packets from moisture.
- To prepare the spray mixture, drop the required number of unopened packets, as determined under RECOMMENDATIONS, into the spray tank while filling with water to the desired level (whenever possible direct the fill water over the top of the packets to increase the rate of solubility). Where dosages of Imidan 50-WSB are expressed as fractions of pounds, prepare the tank mix load to the lower of the nearest whole package.
- Operate the agitator while mixing.
- Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within approximately three to five minutes from the time they were added to the spray tank.
- Once the packets have completely dissolved, add other chemicals following conventional mixing order practices.
- Tank-mix solutions containing boron will affect the solubility of the water soluble film. When preparing tank mixes containing boron, add the correct amount of Imidan 50-WSB to the spray tank first. Make sure that the water soluble packets are completely dissolved. Add boron-containing solutions to the spray tank last.

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 50-WSB 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.

In addition, all directions and requirements specified for Sprinkler Irrigation Systems must be followed.

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-WSB 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-WSB over a 30-60 minute period. Shut off injection equipment. Continue to operate irrigation system until Imidan 50-WSB has been cleared from the last sprinkler head. Imidan 50-WSB can be injected at the end of the irrigation cycle or as a separate application. Do not use end guns. Imidan 50-WSB 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-WSB is premixed in the supply tank, the tank mix must be buffered to a pH of 5.5 or lower. 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.

RESISTANCE MANAGEMENT

Imidan 50-WSB is an organophosphate insecticide. Based on historical use patterns in some areas, certain pest species listed on this label may have developed resistance to organophosphate insecticides. Consult your local agricultural advisor, State Cooperative Extension Service, or regional Gowan Company representative for recommendations.

USE LIMITATIONS

Do not exceed the maximum rate of Imidan 50-WSB per acre or the time limitations specified for the individual crops.

USE RECOMMENDATIONS

FRUIT AND NUT CROPS

DORMANT SPRAYS: Imidan 50-WSB 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-WSB may be used in combination with spray oils; always follow spray oil manufacturer's label recommendations.

SPLIT APPLICATION SPRAYS: Applications to tree fruits and nuts may be made using a split application spray schedule. See crop for more specific application directions (if applicable).

The split application method may be used to improve efficacy and, in the case of nut crops, to time insecticide applications at the onset of hullsplit of different maturing varieties that may be present within a single orchard. Check with your local agricultural advisor, State Cooperative Extension Service or regional Gowan Company representative for recommendations.

PREHARVEST INTERVAL

The required days between the last application and harvest are given in () after each crop name.

RECOMMENDATIONS FRUIT AND NUT CROPS

CROP	PEST	USE RATE lbs./acre	COMMENTS
ALMONDS (30)	Peach Twig Borer	6	Limit use on bearing almonds to one foliar application per season.
	<ul style="list-style-type: none"> • Pruning must occur before any dormant treatment of Phosmet • Nuts must be harvested mechanically. • Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. 		

FRUIT AND NUT CROPS (continued)

CROP	PEST	USE RATE lbs./acre	COMMENTS
<p>APPLES (7)</p>	<p>Apple Maggot, Codling Moth, Elm Spanworm, Dock Sawfly, European Corn Borer, European Sawfly, Fruitree Leafroller, Green Fruitworm, Gypsy Moth, Japanese Beetle, Mealybug, Orange Tortrix, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Redhumped Caterpillar, Rose Chafer, San Jose Scale</p>	<p>3 – 8 (or 1 – 1 ½ lbs. per 100 gals. not to exceed 8 lbs./acre)</p>	<p>For heavy insect infestations and areas west of the Rockies, use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray programs.</p> <ul style="list-style-type: none"> • East of the Rockies: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 4 days. • West of the Rockies: Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. • Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. • Do not apply more than 31 lbs. Imidan 50-VSB per acre per crop season. • Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application. • Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. • Applications during the dormant season are prohibited. • For groundboom and airblast applications, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For aerial applications, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition.
<p>APRICOTS (East of the Rockies) (14)</p>	<p>Apple Maggot, Fruitree Leafroller, Japanese Beetle, Orange Tortrix, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Rose Chafer, Western Tussock Moth</p>	<p>3 – 6 (or 1 – 1 ½ lbs. per 100 gals. not to exceed 6 lbs./acre)</p>	<p>For heavy insect infestations use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray programs.</p> <ul style="list-style-type: none"> • Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Harvesting is prohibited for 14 days after application. • Do not apply more than 18.2 lbs. Imidan 50-WSB per acre per year. • Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application. • Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. • For groundboom and airblast applications, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For aerial applications, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • Applications during the dormant season are prohibited.

FRUIT AND NUT CROPS (continued)

CROP	PEST	USE RATE lbs./acre	COMMENTS
APRICOTS (West of the Rockies) (14)	Apple Maggot, Fruittree Leafroller, Japanese Beetle, Orange Tortrix, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Rose Chafer, Western Tussock Moth	3 – 6 (or 1 – 1 ½ lbs. per 100 gals. not to exceed 6 lbs./acre)	For heavy insect infestations and areas west of the Rockies, use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray programs.
<ul style="list-style-type: none"> • Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Harvesting is prohibited for 14 days after application. • Do not apply more than 18.2 lbs. Imidan 50-WSB per acre per year. • After an application of Imidan 50-WSB during the growing season, do not enter or allow entry into treated areas to conduct thinning tasks for the remainder of that growing season. • After an application of Imidan 50-WSB during the dormant season, do not enter or allow entry into treated areas to conduct pruning tasks or other hand labor tasks for the remainder of that dormant season. • Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application. • Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. • For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For groundboom and airblast applications during the dormant season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For aerial applications during the growing season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • During the dormant season, aerial applications are prohibited. 			
BLUEBERRIES (High Bush) (3)	Blueberry Maggot, Cherry Fruitworm, Cranberry Fruitworm, Flea Beetle, Grasshopper, Japanese Beetle, Plum Curculio, Obliquebanded Leafroller, Redbanded Leafroller, Redstriped Fireworm, Rose Chafer, Sawfly, Spanworm, Strawberry Root Weevil Adult	2	If applying by air, apply in a minimum of 2 gals. of water by aircraft.
<ul style="list-style-type: none"> • Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours. Harvesting is prohibited for 3 days after application. • Do not apply more than 10 lbs Imidan 50-WSB per acre per year. • Do not make more than 5 applications per acre per year. • Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 3 days after application of this product. • Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. • For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For groundboom and airblast applications during the dormant season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For aerial applications, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. 			

FRUIT AND NUT CROPS (continued)

CROP	PEST	USE RATE lbs./acre	COMMENTS
BLUEBERRIES (Low Bush) (3)	Blueberry Maggot, Cherry Fruitworm, Cranberry Fruitworm, Flea Beetle, Grasshopper, Japanese Beetle, Plum Curculio, Obliquebanded Leafroller, Redbanded Leafroller, Redstriped Fireworm, Rose Chafer, Sawfly, Spanworm, Strawberry Root Weevil Adult	2	If applying by air, apply in a minimum of 2 gals. of water by aircraft. <ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 10 lb Imidan 50-WSB per acre per year. Repeat applications as necessary with a minimum of 10 days between applications. Do not make more than 5 applications per acre per year.
CHERRIES Sour (Tart) (7)	Cherry Fruit Fly, Fruitree Leafroller, Japanese Beetle, Peach Twig Borer, Plum Curculio, Rose Chafer, San Jose Scale	3 - 3 ½ (or 1 lb. per 100 gals. not to exceed 3 ½ lbs./acre)	Repeat applications as necessary in accordance with insect infestations and local and State spray programs. <ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 10.5 lbs. Imidan 50-WSB per acre per year. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application.
GRAPES (East of the Rockies) (see text for PHI)	Rose Chafer, Banded Grape Bug, Flea Beetle, Grape Berry Moth, Grape Cane Borer, Grape Cane Girdler, Grape Leafhopper, Grape Mealybug, Japanese Beetle, Lygocoris Bug, Redbanded Leafroller	2 - 3	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. Repeat applications as necessary in accordance with insect infestations and local and State spray programs. <ul style="list-style-type: none"> Do not apply within 7 days of harvest when using rates of 2 lbs. per acre or less. Do not apply within 14 days of harvest when using rates greater than 2 lbs. per acre. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 14 days. All hand labor tasks, including hand harvesting, are prohibited for 14 days after application. For application rates of 2 lbs or less, mechanical harvesting is permitted at 7 days after application. Do not apply more than 9.1 lbs. Imidan 50-WSB per acre per year. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area after application of this product. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For groundboom and airblast applications during the dormant season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. Aerial application is prohibited.

FRUIT AND NUT CROPS (continued)

CROP	PEST	USE RATE lbs./acre	COMMENTS
GRAPES (West of the Rockies) (See text for PHI)	Grape Leafroller, Omnivorous Leafroller, Western Grapeleaf Skeletonizer	2	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.
<ul style="list-style-type: none"> Do not apply within 7 days of harvest when using rates of 2 lbs. per acre or less. Do not apply within 14 days of harvest when using rates greater than 2 lbs. per acre. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 14 days. Do not apply more than 9.1 lbs. Imidan 50-WSB per acre per year. After an application of Imidan 50-WSB during the growing season, do not enter or allow entry into treated areas to perform hand harvesting tasks or any other hand labor tasks EXCEPT for scouting, hand weeding, and irrigating for the remainder of that growing season. Note: scouting, hand weeding, and irrigating tasks are prohibited until the REI has expired. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area after application of this product. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. Aerial application is prohibited. Applications during the dormant season are prohibited. 			
NECTARINES (East of the Rockies) (14)	Apple Maggot, Japanese Beetle, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Rose Chafer, San Jose Scale	3 – 6 (or 1 – 1 ½ lbs per 100 gals. not to exceed 6 lbs./acre)	For heavy insect infestations use higher dosage rates (4 ¼ lbs./acre). Repeat applications as necessary in accordance with insect infestations and local and State spray programs.
<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 4 days. Harvesting is prohibited for 14 days after application. Do not apply more than 18.2 lbs. Imidan 50-WSB per acre per year. Do not use Omite® in combination with Imidan 50-WSB on late maturing nectarine varieties as fruit injury may result. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application of this product. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. Applications during the dormant season are prohibited. For groundboom and airblast applications, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For aerial applications, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. 			

FRUIT AND NUT CROPS (continued)

<p>NECTARINES (West of the Rockies) (14)</p>	<p>Apple Maggot, Japanese Beetle, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Rose Chafer, San Jose Scale</p>	<p>3 – 6 (or 1 – 1 ½ lbs per 100 gals. not to exceed 6 lbs./acre)</p>	<p>For heavy insect infestations use higher dosage rates (4 ¼ lbs./acre). Repeat applications as necessary in accordance with insect infestations and local and State spray programs.</p>
<ul style="list-style-type: none"> • Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Harvesting is prohibited for 14 days after application. • Do not apply more than 18.2 lbs. Imidan 50-WSB per acre per year. • After an application of Imidan 50-WSB during the growing season, do not enter or allow entry into treated areas to conduct thinning tasks for the remainder of that growing season. • After an application of Imidan 50-WSB during the dormant season, do not enter or allow entry into treated areas to conduct pruning tasks or any other hand labor tasks for the remainder of that dormant season. • Do not use Omite® in combination with Imidan 50-WSB on late maturing nectarine varieties as fruit injury may result. • Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application of this product. • Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. • For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For groundboom and airblast applications during the dormant season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For aerial applications during the growing season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • During the dormant season, aerial applications are prohibited. 			
<p>PEACHES (East of the Rockies) (14)</p>	<p>Japanese Beetle, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Rose Chafer, San Jose Scale</p>	<p>3 – 6 (or 1 – 1 ½ lbs. per 100 gals not to exceed 6 lbs./acre)</p>	<p>For heavy insect infestations use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray programs.</p>
<ul style="list-style-type: none"> • Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 4 days. Harvesting is prohibited for 14 days after application. • Do not apply more than 23.8 lbs. Imidan 50-WSB per acre per crop season. • Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application of this product. • Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. • For groundboom and airblast applications, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • For aerial applications, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. • Applications during the dormant season are prohibited. 			

FRUIT AND NUT CROPS (continued)

<p>PEACHES (West of the Rockies) (14)</p>	<p>Japanese Beetle, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Rose Chafer, San Jose Scale</p>	<p>3 - 6 (or 1 - 1 ½ lbs. per 100 gals not to exceed 6 lbs./acre)</p>	<p>For heavy insect infestations and areas west of the Rockies, use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray programs.</p>
<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Harvesting is prohibited for 14 days after application. After an application of Imidan 50-WSB during the growing season, do not enter or allow entry into treated areas to conduct thinning tasks for the remainder of that growing season. After an application of Imidan 50-WSB during the dormant season, do not enter or allow entry into treated areas to conduct pruning tasks or any other hand labor tasks for the remainder of that dormant season. Do not apply more than 23.8 lbs. Imidan 50-WSB per acre per crop season. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application of this product. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. Applications during the dormant season are prohibited. For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For groundboom and airblast applications during the dormant season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For aerial applications during the growing season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. During the dormant season, aerial applications are prohibited. 			
<p>PEARS (7)</p>	<p>Apple Maggot, Codling Moth, Elm Spanworm, Fruitree Leafroller, Gypsy Moth, Japanese Beetle, Mealybug, Plum Curculio, Redbanded Leafroller, Rose Chafer</p>	<p>3 - 8 (or 1 - 1 ½ lbs. per 100 gals. not to exceed 8 lbs./acre)</p>	<p>For heavy insect infestations and areas west of the Rockies, use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray recommendations.</p>
<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Do not apply more than 22.4 lbs. Imidan 50-WSB per acre per year. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application of this product. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For groundboom and airblast applications during the dormant season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For aerial applications during the growing season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. During the dormant season, aerial applications are prohibited. 			
<p>PECANS (14)</p>	<p>Black Pecan Aphid, Fall Webworm*, Hickory Shuckworm, Pecan Nut Casebearer, Pecan Weevil*, Southern Green Stink Bug*, Spittlebug</p>	<p>4 ½ (or 1 ½ lbs. per 100 gals. not to exceed 4 ½ lbs./acre)</p>	<p>Apply when infestations start. Repeat applications as necessary in accordance with insect infestations and local and State spray programs. *For pecan weevil repeat applications should be made at 7 days intervals. For control of low to moderate populations of pecan weevils; adequate control may not be achieved when heavy populations are present.</p>
<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 14 lbs. Imidan 50-WSB per acre per year. Do not graze or feed livestock on cover crops grown in treated pecan groves. Nuts must be harvested mechanically. Pruning in nut crops must occur before dormant applications of Phosmet. 			

FRUIT AND NUT CROPS (continued)

<p>PLUMS, PRUNES (East of the Rockies) (7)</p>	<p>Apple Maggot, Codling Moth, Japanese Beetle, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redhumped Caterpillar, Redbanded Leafroller, Rose Chafer, San Jose Scale</p>	<p>3 – 6 (or 1 – 1 ½ lbs. per 100 gals. not to exceed 6 lbs./acre)</p>	<p>For heavy insect infestations use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray programs.</p> <ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Hand harvesting is prohibited for 14 days after application. Mechanical harvesting is permitted at 7 days after application. Do not apply more than 18.2 lbs. Imidan 50-WSB per acre per year. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application of this product. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. For groundboom and airblast applications, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For aerial applications, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. Applications during the dormant season are prohibited.
<p>PLUMS, PRUNES (West of the Rockies) (7)</p>	<p>Apple Maggot, Codling Moth, Japanese Beetle, Omnivorous Leafroller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Redhumped Caterpillar, Redbanded Leafroller, Rose Chafer, San Jose Scale</p>	<p>3 – 6 (or 1 – 1 ½ lbs. per 100 gals. not to exceed 6 lbs./acre)</p>	<p>For heavy insect infestations and areas west of the Rockies, use higher dosage rates. Repeat applications as necessary in accordance with insect infestations and local and State spray programs.</p> <ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Hand harvesting is prohibited for 14 days after application. Mechanical harvesting is permitted at 7 days after application. Do not apply more than 18.2 lbs. Imidan 50-WSB per acre per year. After an application of Imidan 50-WSB during the growing season, do not enter or allow entry into treated areas to conduct hand-thinning tasks for the remainder of that growing season. After an application of Imidan 50-WSB during the dormant season, do not enter or allow entry into treated areas to conduct pruning tasks or any other hand labor tasks for the remainder of that dormant season. Do not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 14 days after application of this product. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. For groundboom and airblast applications during the growing season, do not apply this product within 25 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For groundboom and airblast applications during the dormant season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. For aerial applications during the growing season, do not apply this product within 50 feet of (1) buildings occupied by humans for residential, commercial, or business purposes, including but not limited homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, hospitals, and (2) outdoor recreational areas such as school grounds, athletic fields, and parks. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition. During the dormant season, aerial applications are prohibited.

FIELD, FORAGE, AND VEGETABLE CROPS

CROP	PEST	USE RATE lbs./acre	COMMENTS
ALFALFA (See text for PHI)	Alfalfa Blotch Leafminer*, Alfalfa Plant Bug*, Common and Egyptian Alfalfa Weevil larvae and adults, Fleahopper, Grasshopper, Lygus Bugs*, Pea Aphid*, Potato Leafhopper**, Leafhoppers, Spittlebugs	Arizona, California and Nevada: 1 1/2 All other alfalfa growing regions: 2	Apply 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. For application by irrigation systems, apply specified dosage per acre. Follow all directions under the GENERAL CHEMIGATION section of this label. * For control of pea aphid and other alfalfa pests, use Imidan 50-WSB in tank mix combination with other insecticides registered for use on alfalfa. ** Recommended for potato leafhopper in the Northeast and North Central States only.
	<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 5 days. Do not apply more than once per cutting. Do not apply to alfalfa in the bloom period. Do not use with latex or pineolene-based adjuvants or any agricultural sticker or extender. In Arizona, California, and Nevada, do not graze or cut for hay within 14 days of application. In all other alfalfa growing regions, do not graze or cut for hay within 7 days of application. 		
FIELD MARGINS (margins of cultivated fields and forage crop sites listed on this label)	Grasshopper	3 - 4	Apply in 10 - 50 gals. of water per acre (20 - 50 gals. in dense stands) by ground equipment or in 5 - 10 gals. of water by aircraft.
	<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 5 days. Do not graze livestock in treated areas. Do not harvest for food or feed. 		
PEAS , Fresh and Dry (Pacific Northwest only) (18)	Pea Weevil, Pea Leaf Weevil	1 1/2 - 2	Apply 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.
	<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 5 days. Do not apply more than 6 lbs. Imidan 50-WSB per acre per crop season. 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 (7)	Colorado Potato Beetle, European Corn Borer, Potato Flea Beetle, Potato Leafhopper	2	Apply in a minimum of 2 gals. of water per acre. Repeat applications as necessary throughout the growing season with a minimum of 10 days between applications. For application by irrigation systems, apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 5 days. Do not apply more than 10 lbs. Imidan 50-WSB per acre per crop season. Do not apply within 7 days of harvest. Use only on potatoes to be harvested by machine. 		

SHADE AND ORNAMENTAL TREES AND WOODY EVERGREENS

CROP	PEST	USE RATE	COMMENTS
DECIDUOUS SHADE and ORNAMENTAL TREES, and WOODY EVERGREENS (such as Ash, Arborvitae, Beech, Birch, Cedar, Dogwood, Fir, Hemlock, Juniper, Maple, Oak, Pine, Spruce, Willow, Hickory, Locust, Liquidambar, Hawthorne, Elm and Yew)	Elm Spanworm, Birch Leafminer, Eastern Tent Caterpillar, Elm Leaf Beetle larvae, Gypsy Moth, Japanese Beetle, Redhumped Caterpillar, Spring Cankerworm	1 - 1 1/2 lbs. per 100 gals.	Apply when insects or their damage occur. Thoroughly wet 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. Choose a cool calm period, preferably in early morning or evening.
	<ul style="list-style-type: none"> Do not apply if rain is expected or before leaf surfaces are dry. Do not make more than 3 applications per year Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 24 hours 		

CHRISTMAS TREE PLANTATIONS	Eastern Pine Shoot Moth, European Pine Shoot Moth, Nantucket Pine Tip Moth, Pitch Eating Weevil, Pales Weevil, adult Root Collar Weevil, Sawfly species, Scale species	2	Apply 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.
	<ul style="list-style-type: none"> Do not apply if rain is expected or before leaf surfaces are dry. Do not make more than 3 applications per year Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 13 days. 		
PINE TREES (Pacific Northwest only)	European Pine Shoot Moth (<i>Rhyacionia buoliana</i>)	2 lbs. per acre or for individual trees 2 lbs. per 100 gals.	Spray trees for thorough coverage of foliage. Repeat at 2 week intervals throughout flight period of the moths.
	<ul style="list-style-type: none"> Do not apply if rain is expected or before leaf surfaces are dry. Do not make more than 3 applications per year Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 13 days. 		
PINE SEEDLINGS (White, Slash and Loblolly)	Pales Weevil (<i>Hylobius pales</i>), Pitch Eating Weevil (<i>Pachylobius picivorus</i>)	4% Top Dip Solution Use this amount of Imidan <u>To make 50-WSBSE</u> 5 gals. 3 1/2 lbs. 30 gals. 20 lbs. 50 gals. 33 1/2 lbs. 100 gals. 67 lbs.	Use Imidan 50-WSB 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-WSB on the foliage under high rainfall conditions. Some slight needle burn and first year growth reduction may occur on treatment of loblolly pine. Agitate frequently to keep Imidan 50-WSB in suspension. Five gals. of solution should be enough to treat 10,000 seedlings.
	<ul style="list-style-type: none"> Do not keep Imidan 50-WSB solution overnight. Make up a fresh batch each day that seedlings will be dipped. Do not make more than 3 applications per year Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 13 days. Handlers must also wear long-sleeved shirt and long pants, shoes, socks, additional layer of clothing, chemical-resistant gloves, and an air purifying respirator (OV). 		

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:

- Sweep up spilled material being careful not to create dust.
- Place sweepings in an open drum.
- 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. Completely avoid skin and eye contact with this material. Brush the slurry into cracks and crevices and allow to stand for 2 - 3 minutes.
- Spread a suitable absorbent such as clay, sawdust, or kitty litter on the slurred liquid. Shovel absorbed material into an open drum. Repeat if necessary.
- Flush area with water while observing proper environmental considerations.
- 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.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE) CALL CHEMTREC (800) 424-9300.

For other product information, contact Gowan Company or see Material Safety Data Sheet

NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our recommendations for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and User.

Gowan Company warrants that his product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY

TO THE FULLEST EXTENT PERMITTED BY LAW, GOWAN COMPANY'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY'S SOLE DISCRETION.

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