

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460 EPA Registration No.

10163-313

Date of Issuance:

MAR - 4 2010

NOTICE OF PESTICIDE: ☑ Registration

: ☑ Registration ☐ Reregistration

(under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Imidan® 60WDG Agricultural Insecticide

Name and Address of Registrant (include ZIP Code): Julie Butcher, Registration Specialist Gowan Company P.O. Box 5569

Yuma, AZ 85366-5569

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(a) provided that you:

(See comments on pages 2-6)

A copy of your label stamped "Accepted with Comments" is enclosed for your records.

Signature of Approving Official:

Date:

Refer to Page 6

MAR - 4 2010

Richard J. Gebken, Product Manager (10) Registration Division, Insecticide Branch 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.

- A. Revise the EPA Registration Number to read, "EPA Reg. No. 10163-313"
- B. Within sixteen (16) months of the date on this Notice of Registration (NOR), provide to the Agency acceptable data packages for Guideline Studies as follows: OPPTS 830.6317, (one year storage stability) and OPPTS 830.6320 (corrosion characteristics). It is required that the observations be made at 0, 3, 6, 9, and 12 month intervals, per the Agency's product chemistry review (copy attached) If acceptable data is not submitted within 16 months of this NOR, this registration will expire on July 3, 2011.

C. <u>Make the following label changes:</u>

- 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. Per the Agency's acute toxicity review (copy attached), revise the Hazards to Humans and Domestic Animals Statement as follows:

"Warning-Aviso

May be fatal if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. [Wear protective eyewear]. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear: Long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Barrier Laminate, Viton, Selection Category H).

Also, Based on toxicity rankings from the acute toxicity review, re-order the **FIRST AID** statements as follows:

If swallowed . . .

If in eyes . . .

"Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information"

Additional First Aid and Precautionary Statements are acceptable

3. Revise the **PERSONAL PROTECTIVE EQUIPMENT (PPE)** statement to require that ground boom applicators not in fully enclosed cabs must also wear chemical resistant gloves.

4. The **ENGINEERING CONTROLS** statement must be revised to state that applications may only be made in equipment with ENCLOSED CABS for ground airblast applicators and flaggers, and must be revised by adding the following text:

"Applicators using airblast equipment and flaggers must use an enclosed cab meeting the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, such applicators and flaggers must:

- -wear the personal protective equipment required above for airblast applicators and flaggers.
- -be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area: coveralls, chemical resistant gloves, chemical resistant footwear, and chemical resistant headgear if overhead exposure;
- -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."
- Aerial and chemigation applications are prohibited, and all references to such on all
 parts of the label must be deleted, including in the crop specific **DIRECTIONS FOR**USE, which must not include any instructions or rate calculations for aerial
 applications.
- 6. Revise the **USE PRECAUTIONS** statement by adding the following: "Use in residential, park, or recreational areas is prohibited."
- 7. 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 references to chemigation and aerial applications, and also revising the remaining statements by changing the phrases "when wind speed is 10 mph or less" to "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.

- a. Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, and by avoiding excessive spray boom pressure.
- b. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

- c. Make ground applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is 3 to 10 mph. For all applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
- d. Do not make 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.
- e. 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.
- f. All application equipment must be properly maintained and calibrated using appropriate carriers.
- g. 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.
- h. For ground-boom, 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).
- 8. 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 70-W is only for use in commercial agricultural crops and areas as listed. Do not apply to forests or natural fallow or wooded areas."

Also, 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 lbs (1.2 lbs 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. Revise the maximum single application rate for Almonds (everywhere, and for both dormant and in-season applications) to 5 lbs per acre (3 lbs ai), as listed in the Agency's Reregistration Eligibility Decision (RED) document.

Also, for Almonds, add one of the following statements:

- 1. "Do not apply phosmet until after hand-thinning, pruning, poling, and other pre-harvest hand activities have been completed." OR
- 2. "Hand-thinning, poling, and pruning are prohibited until 28 days after application of phosmet."

10. Revise the maximum single application rate for Cherries (sour/tart) to 2.5 lbs per acre (1.5 lbs ai), as listed in the Agency's RED.

Also, for Cherries, add one of the following statements:

- 1. "Do not apply phosmet until after hand-thinning activities have been completed." OR
- 2. "hand-thinning is prohibited until 14 days after application of phosmet."
- 11. For Pecans, add one of the following statements:
 - a. "Do not apply phosmet until after hand-thinning, pruning, poling, and other preharvest hand activities have been completed." OR
 - b. "Hand-thinning, poling, and pruning are prohibited until 28 days after application of phosmet."
- 12. Revise the maximum single application rate for Pistachios to 5 lbs per acre (3 lbs ai), as listed in the RED.

Also, for pistachios, add one of the following statements:

- a. "Do not apply phosmet until after hand-thinning, pruning, poling, and other pre-harvest hand activities have been completed." OR
- b. "Hand-thinning, poling, and pruning are prohibited until 28 days after application of phosmet."
- 13. For Walnuts, filberts, and other nuts, add one of the following statements:
 - a. "Do not apply phosmet until after hand-thinning, pruning, poling, and other preharvest hand activities have been completed." OR
 - b. "Hand-thinning, poling, and pruning are prohibited until 28 days after application of phosmet."
- 14. Revise the use instructions for Conifer Tree Seed Orchards by deleting the reference to "3-6 applications as needed" in the last phrase. This phrase is contradictory to the use limitation of 3 applications per year. Revise to read "First application should be applied within 30 days of peak pollen flight followed by up to 2 applications as needed."
- 15. 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)."

16. 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 "

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

Gowan should note that this label, as currently submitted does <u>not</u> include all of the 9 time limited uses (including apples, pears, peaches, nectarines, plums, prunes, grapes, blueberries, and apricots) for which the Agency recently approved interim mitigation under label amendments recently accepted for 2 other similar phosmet products (10163-169 and 10163-175). Because this application for a new registration does not fall under the purview of the January 2007 Agency interim risk mitigation Decision Document for these 9 time limited uses (that applied only to products being amended under reregistration), future additions of any of these uses to the 10163-313 label (which would be application for amendment to a new product registration) would trigger new risk assessments by the Agency's Health Effects Division, using the most recently accepted toxicological endpoints. Such risk assessments would possibly alter the Agency's safety findings and trigger more restrictive risk mitigations, including substantially longer REIs, pre-harvest intervals, more stringent rate restrictions, etc. (This already has occurred for some of the uses on this new product label, such as cherries, almonds, pistachios, pecans, walnuts, and other tree nuts):

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 Myers, at (703) 347-8874, or via email at myers.clayton@epa.gov.

Sincerely,

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Richard Gebken Product Manager 10

Insecticide Branch

Registration Division (7504P)

Enclosures

Water Dispersible Granules

ACTIVE INGREDIENT: Phosmet	% By Wt
N-(Mercaptomethyl) phthalimide, S-(O,O-dimethyl phosphorodithioate)	60.0%
OTHER INGREDIENTS	<u>4</u> 0.0%
TOTAL	

WARNING-AVISO

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

	FIRST AID	
	ORGANOPHOSPHATE	
If inhaled	 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 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 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 	
If swallowed	 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 containe 0798 for emergency medic	er or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478- cal treatment information.	
	NOTE TO PHYSICIAN	
	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, all other applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Socks and shoes
- Chemical-resistant gloves for mixers and loaders, applicators using hand held equipment
- Chemical resistant apron for mixers and loaders
- Chemical-Resistant headgear for overhead exposure.

NET	CONTENTS	LBS

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



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

ACCEPTED
With COMMENTS
In EPA Letter Dated:

Under the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the pesticide Registered under EPA Reg. No:

10163-313

03/12/2009

pplicators performing pine seedling dipping-mu ear:

- · Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- · Chemical-resistant apron
- A respirator with an organic-vapor removing 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.

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

Mixers and loaders must wear:

- Personal Protective Equipment identified above is required for mixers/loaders
- Be provided and must have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown;
 - 1. Coverails
 - 2. Chemical-resistant footwear
 - A respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSMH/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.

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

Airblast, flaggers, and motorized groundboom applicators must in be in fully enclosed cabs or, if not in fully enclosed cabs, applicators must wear double-layer clothing, chemical-resistant headgear, respirator, and chemical-resistant footwear and socks.

Applicators using airblast equipment and flaggers supporting aerial applications must wear:

- Personal Protective Equipment identified above is required for airblast applicators and flaggers.
- · 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

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.

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. Limit spray drift.

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 treatment of 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 60-WDG 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 60-WDG.

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 decisions.

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 ICEs at the application site as measured by an anemometer. Use a coarse or coarser spray (ASAE definition 572) for standard nozzles, or a volume median diameter (VMD) of 385 microns or greater for spinning atomizer nozzles.

For overhead chemigation:

Apply only when wind speed is 10 mph or less.

For airblast applications:

Do not direct spray above trees and vines, and turn off outward pointing nozzles at row ends and when spraying the outer 2 rows. Apply only when the wind speed is 10 mph or less at the application site.

For aerial applications:

The boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Apply only when the wind speed is10 mph or less. Use a coarse or coarser spray for standard nozzles (ASAE definition 572), or a volume median diameter (VMD) of 385 microns or greater for spinning atomizer nozzles. If the application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy. 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 area by adjusting the path of the aircraft upwind.

The applicator also must use all other measures necessary 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. Use in park or recreational areas is prohibited.

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:

- Coverails
- · 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:

- Fill the tank 1/2 full of water.
- · While agitating, add the required amount of Imidan 60-WDG
- · Continue agitation for three and five minutes or until the Imidan 60-WDG is fully dispersed.
- Once the Imidan 60-WDG is fully dispersed, maintain agitation and continue filling the tank with water. Imidan 60-WDG should be thoroughly mixed with water before adding any other material.
- As the tank is filling, add tank mix partners (if desired) then add the required volume of spray adjuvant. Always add the spray adjuvant last.
 Antifoaming agents may be used.

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 60-WDG 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, succeeding a positive displacement injection pump (e.g. diaple pump) effectively designed and constructed or 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 60-WDG 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 60-WDG over a 30-60 minute period. Shut off injection equipment. Continue to operate irrigation system until Imidan 60-WDG has been cleared from the last sprinkler head. Imidan 60-WDG can be injected at the end of the irrigation cycle or as a separate application. Do not use end guns. Imidan 60-WDG 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 60-WDG 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 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 60-WDG per acre or the time limitations specified for the individual crops.

USE RECOMMENDATIONS FRUIT AND NUT CROPS

DORMANT SPRAYS: Imidan 60-WDG may be used during dormancy to control specified insects listed in each crop grouping which may overwinter on the tree and vine crops. Imidan 60-WDG may be used in combination with spray oils; always follow spray oil manufacturer's label recommendations. Pruning must occur before any dormant treatments of Phosmet.

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.

FRUIT AND NUT CROPS CROP PEST COMMENTS **USE RATE** lbs./acre **ALMONDS** Peach Twig Borer Limit use on bearing almonds to one foliar application per $5 - 5 \frac{1}{4}$ (30)season. Do not prune for 7 days following an application of Imidan 60-WDG. Nuts must be harvested mechanically. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. ALMONDS Peach Twig Borer, Navel Orangeworm $5 - 6^{1/5}$ In California only, to obtain optimum navel orangeworm (California only) control in the spring application, proper timing of sprays should be coordinated with effective use of a navel (30)orangeworm monitoring system. Late season treatments must be applied before hull split reaches 10%. Do not make more than 2 applications per season as a foliar spray. Do not prune for 7 days following an application of Imidan. Nuts must be harvested mechanically. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. DORMANT SPRAY: Peach Twig $5-6^{1/5}$ For control of scale insects during dormant application, Borer, San Jose Scale tank mix recommended rate of Imidan with dormant spray oil. Follow oil manufacturer's use directions. Add oil to the spray tank last, after buffer and Imidan 60-WDG have been added. Do not make more than 2 applications per season as a foliar spray. Do not prune for 7 days following an application of Imidan. Nuts must be harvested mechanically. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area.

		CROPS (continued			
CROP	PEST	USE RATE lbs./acre	COMMENTS		
CRANBERRIES (14) (Except California)	Fireworms, Cranberry Fruitworm, Cranberry Weevil, Spanworms, Gypsy Moth, Sparganothis Fruitworm, Cutworms, Blossomworm, False Armyworm, Cranberry Tipworm Midge	1 ½ - 4 ^{2/3} (not to exceed 18 ^{1/5} lbs. of Imidan 60-WDG per season)	For heavy insect infestations, use higher dosage rates. For best results, treat early-stage larvae. Apply in sufficient water to obtain complete coverage. Repeat applications no sooner than 10 days with a minimum spray volume of 20 gals. per acre by ground and 2 gals. per acre by air.		
	 Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply within 14 days of harvest. May need to use higher dosage for Fruitworm and Cranberry Weevil control. Consult with your pest management advisor or local Extension Service for specific recommendations on rates and timing. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. 				
CHERRIES Sour (Tart) (7)	Cherry Fruit Fly, Fruittree Leafroller, Japanese Beetle, Peach Twig Borer, Plum Curculio, Rose Chafer, San Jose Scale	2 ½ - 2 ^{7/8} (or 7/8 lb. per 100 gals. not to exceed 2 ^{7/8}	Repeat applications as necessary in accordance with insect infestations and local and State spray programs.		
	Syneta Beetle	1 1/3	Apply in a minimum of 50 gals. of water per acre. Use prebloom (popcorn stage) if beetles are present, and allow 5 days before introducing bees. If not sprayed prebloom and Syneta beetle is a problem, apply at petal fall prior to shuck fall.		
 Do not enter or allow entry into treated areas during the rest Do not apply more than 8 % lbs. Imidan 60-WDG per acre p The user shall not authorize any person who is not covered members of the general public involved in "pick-your-own," " 14 days after application. 			ear. ne Worker Protection Standard (WPS), such as ck," or similar operations, to enter a treated area for		
PECANS (14)	Limit spray drift; turn airblast spray nozzles i Black Pecan Aphid, Fall Webworm*, Hickory Shuckworm, Pecan Nut Casebearer, Pecan Weevil*, Southern Green Stink Bug*, Spittlebug	nward on row ends; 2 ^{1/3} – 3 ^{5/8} (or 1 ^{1/6} lb. per 100 gals. not to exceed 3 ^{5/8} lbs./acre)	For heavy insect infestations, use higher dosage rates. Check with your local Extension Service for recommended use rates in your area. Apply in sufficient water for complete coverage when infestations start. Repeat applications as necessary in accordance with insect infestations and local and State spray programs. For low to moderate populations of pecan weevil, use 3 5/8 lbs. per acre and repeat application at 7 day intervals. *Adequate control may not be achieved when heavy		
PISTACHIOS California only) 14)	 Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 11 ^{2/3} lbs. Imidan 60-WDG per acre per year. Do not prune for 7 days following an application of Imidan. Nuts must be harvested mechanically. Do not graze or feed livestock on cover crops grown in treated pecan groves. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. Navel Orangeworm, Obliquebanded Leafroller, Peach Twig Borer For optimum navel orangeworm control in the spring, use an appropriate navel orangeworm monitoring system to determine proper timing of the 				
	spray. Late season treatment for navel orangework must be applied before hull split reaches 10%. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 20 lbs. Imidan 60-WDG per acre per year. Do not prune for 7 days following an application of Imidan. Do not apply more than 6 3/5 lbs. per acre per season as a foliar spray. Nuts must be harvested mechanically.				
	Do not allow livestock to graze or feed on co Limit spray drift; turn airblast spray nozzles in DORMANT SPRAY: Peach Twig Borer, San Jose Scale				
	 Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 3 days. Do not apply more than 20 lbs. Imidan 60-WDG per acre per year. Do not prune for 7 days following an application of Imidan. Do not apply more than 6 ^{3/5} lbs. per acre per season as a foliar spray. Nuts must be harvested mechanically. Do not allow livestock to graze or feed on cover crops in treated pistachio groves. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. 				

FRUIT AND NUT CROPS (continued)

CROP	PEST	USE RATE Ibs./acre	COMMENTS
WALNUTS, FILBERTS, and OTHER NUTS	Codling Moth, Navel Orangeworm, Walnut Husk Fly	5 – 9 ^{7/8}	For heavy insect infestations, use higher dosage rates Repeat applications as necessary in accordance with insect infestations and local and State spray programs
(including Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Hickory nut, Macadamia nut, and all hybrids or cultivars of these) (28)	 Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 7 days. Nuts must be harvested mechanically. Do not prune for 7 days following an application of Imidan. Do not apply more than 20 lbs. Imidan 60-WDG per acre per year. 		

FIELD, FORAGE, AND VEGETABLE CROPS CROP PEST **USE RATE** COMMENTS lbs./acre **ALFALFA** Alfalfa Blotch Leafminer*, Alfalfa Plant Arizona, California Apply in a minimum of 10 gals, of water by ground and Nevada: (See text for PHI) Bug*, Common and Egyptian Alfalfa equipment (20 gals. for dense stands) or 5 gals. of water Weevil larvae and adults, Fleahopper, by aircraft. Consult your local farm advisor regarding the proper timing of application. Larvae should be sprayed Grasshopper, Lygus Bugs*, Pea Aphid*, Potato Leafhopper**, All other alfalfa when they are actively feeding. For application by Leafhoppers, Spittlebugs growing regions: 1 1/6 - 1 1/2 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 in tank mix combination with other insecticides registered for use on alfalfa. ** Recommended for potato leafhopper in the Northeast and North Central States only. 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 hav within 7 days of application. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area. 2 1/2 - 3 1/5 FIELD MARGINS Grasshopper Apply in 10 - 50 gals. of water per acre (20 - 50 gals. in (margins of dense stands) by ground equipment or in 5 - 10 gals. of cultivated fields and water by aircraft. forage crop sites listed on this label) 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. 1 1/6 - 1 1/2 Pea Weevil, Pea Leaf Weevil Apply in a minimum of 5 gals. of water per acre by aircraft PEAS. Fresh and or 20 gals. of water by ground equipment. Apply between Dry (Pacific emergence and early pod formation when adult Northwest only) populations are present but before eggs are laid. Consult (18)your local County Agent or Extension Service Representative regarding proper timing of application. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 5 days. Do not apply more than 4 ^{2/3} lbs. Imidan 60-WDG 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** Colorado Potato Beetle, European Apply in a minimum of 2 gals, of water per acre, Repeat Corn Borer, Potato Flea Beetle, Potato applications as necessary throughout the growing season (7)Leafhopper, Potato Tuber Moth 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. Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 5 days. Do not apply more than 7 % lbs. Imidan 60-WDG per acre per crop season. Do not apply within 7 days of harvest. Potatoes must be harvested mechanically. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area.

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CROP	PEST	USE RATE lbs./acre	COMMENTS
SWEET POTATOES (7)	Sweet Potato Weevil, Banded Cucumber Beetle, Whitefringed Beetle, suppression of White Grub and Wireworm	1 1/2	Foliar applications: Apply 1 ½ lbs. of Imidan 60-WDG in a minimum of 2 gallons of water per acre as a full coverage spray. Plantbed treatment: Apply 1 ½ lbs. in 25-50 gallons of water per acre. Allow a minimum of 10 days between foliar and plantbed re-applications.
	Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 4 days for seedbed treatment and 5 days for foliar applications. Do not make more than 5 applications per season. Do not apply within 7 days of harvest. Do not apply more than 7 % lbs. of Imidan 60-WDG per acre per crop season. Sweet potatoes must be harvested mechanically. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the area.		

OTHER USES (NOT FOR HOMEOWNER USE)

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CROP	PEST	USE RATE	COMMENTS
CONIFER TREES (Growing in Christmas Tree Nurseries and Plantations)	European Pine Shoot Moth (Rhyacionia buoliana), Gypsy Moth, Nantucket Pine Tip Moth, Pitch Eating Weevil, Pales Weevil, Adult Root Collar Weevil, Sawfly	1 ½ - 1 ¾ lbs. per acre OR For individual trees 1 ½ lbs. per 100 gals.	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. The addition of a sticker or extender may help retain Imidan 60-WDG on the needles under high rainfall conditions.
	 Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 13 days. Do not make more than 3 applications per year. Limit spray drift; turn airblast spray nozzles inward on row ends; and do not apply when bees are in the a 		
CONIFER TREE SEED ORCHARDS	Seedworms, Coneworms, Seed Bugs, Mealybugs	1 ½ - 1 ¾ lbs. per acre	Thorough coverage of cones is necessary for maximum control. Apply in sufficient water for complete coverage. First application should be applied within 30 days of peak pollen flight followed by 3-6 applications as needed.
	Do not make more than 3 application	ons per year.	estricted entry interval (REI) of 13 days. ends; and do not apply when bees are in the area.
CONFEE			Use Imidan 60-WDG as a 4% top dip, dipping down to and
CONIFER SEEDLINGS (White, Slash and Loblolly)	Pales Weevil (Hylobius pales), Pitch Eating Weevil (Pachylobius picivorus)	4% Top Dip Solution Use this	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
		amount of Imidan <u>To make</u> <u>60-WDG</u>	assure adequate coverage of all top growth. Drain and allow seedlings to dry before planting. The addition of a sticker or extender may help retain Imidan 60-WDG on the
		5 gals. 2 7/8 lbs. 30 gals 16 1/3 lbs. 50 gals. 28 lbs. 100 gals. 56 lbs.	needles under high rainfall conditions. Some slight needle burn and first year growth reduction may occur on treatment of loblolly pine. Agitate frequently to keep lmidan 60-WDG in suspension. Five gals. 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. Handlers must also wear long-sleeved shirt and long pants, shoes, socks, additional layer of clothing, chemical-resistant gloves, chemical-resistant apron and an air purifying respirator (OV). 		
DECIDUOUS TREES, and WOODY EVERGREENS	Elm Spanworm, Birch Leafminer, Eastern Tent Caterpillar, Elm Leaf Beetle larvae, Gypsy Moth, Leafhopper, Magnolia Leafminer, Mealybug, Japanese Beetle, Redhumped Caterpillar, Snails, Slugs,	7/8 to 1 ^{1/6} lb. 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.
	Spring Cankerworm		
	Do not enter or allow entry into treat	ted areas during the re	stricted entry interval (REI) of 13 days.
	Do not make more than 3 application		
	Do not apply if rain is expected or b	efore leaf surfaces are	
ORNAMENTAL PLANTS AND NONBEARING FRUIT AND NUT TREES AND VINES (Growing in nurseries, and	Elm Spanworm, Birch Leafminer, Eastern Tent Caterpillar, Elm Leaf Beetle Larvae, Gypsy Moth, Leafhopper, Magnolia Leafminer, Mealybug, Japanese Beetle, Redhumped Caterpillar, Snails, Slugs, Spring Cankerworm	7/8 to 1 ^{1/6} lb. per 100 gals.	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.
established ornamental landscape plantings)	 Do not enter or allow entry into treat Do not make more than 3 application 		stricted entry interval (REI) of 24 hours.

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: Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or 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. Completely avoid skin and eye contact with this material. Brush the slurry into cracks and crevices and allow to stand for 2 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. 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 LIABILTY 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 and is reasonably fit for the intended purpose referred to 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

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EPA Text Pending: Imidan 60-WDG (to EPA 2/10/09)