

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Terre Farrell Gowan Company P.O. Box 5569 Yuma, Arizona 85366-5569

AUG 23 1999

Subject:

Gowan Azinphos-M 50 WSB

EPA Registration No. 10163-78 Amendment dated August 10, 1999

Label amendments per August 2, 1999 MOA

Dear Ms. Farrell:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that you make the labeling changes indicated below before you release the product for shipment hearing the amended labeling:

- 1. On page 2 in the Directions For Use the last sentence must be changed to read "This product may not be reformulated or used under a State Special Local Need Registration for use on sugarcane, ornamentals, Christmas trees, shade trees or forest trees".
- 2. On page 3 the REI for Alfalfa, Birdsfoot Trefoil must be changed to 4 days.
- 3. On page 4 the REI for the crop Cotton must be corrected to be 4 days.
- 4. On page 5 the REI's for the crops Blackberries (boysenberries, loganberries, raspberries), Blueberries, and Cranberries must be changed from 48 hours to 4 days. The PHI for Blackberries, boysenberries, loganberries, and raspberries must be changed from 3 days to be at least 4 days, since the REI is 4 days.
- 5. On page 6 the REI for Strawberries must be changed to be 4 days.
- 6. On page 7 the REI's must be changed to 4 days for the following crops: Beans Snap, Broccoli....Cauliflower, Celery, Cucumbers, Eggplant, Onions, and Peppers. The PHI for Cucumbers must be changed to be at least 4 days.

- 7. On page 8 the REI's must be changed to 4 days for the following crops: Potatoes, Spinach, Tomatoes, Melons and Southern Pine Seed Orchards. The PHI for Tomatoes must be changed from "two days before harvest" to at least 4 days before harvest.
- 8. The label language permits only aerial application to the crop "Southern Pine Seed Orchards". The comments section must be altered so that only the portion of the statements that is marked in yellow on the submitted label is allowed. The portion of the paragraph starting with "Use 0.2% as"....through... "with low volume sprayers per tree" must be deleted.

Submit two copies of your final printed labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records.

Sincerely, Jeorge Tompkins, Ph.D., Entomologist Insecticide-Rodenticide Branch

Registration Division (7505C)

RESTRICTED USE PESTICIDE DUE TO ACUTE TOXICITY

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification.

GOWAN AZINPHOS-M 50 WSB

(Water Soluble Bags)

DANGER-POISON PELIGRO

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

STATEMENT OF PRACTICAL TREATMENT

Organophosphate Insecticide

IF SWALLOWED: Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Repeat until vomit fluid is clear. Do not give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air. Apply artificial respiration if indicated.

IF IN EYES: Flush eyes with plenty of clear water for at least 15 minutes and get medical attention if irritation persists.

IF ON SKIN: Remove contaminated clothing and wash skin immediately with soap and warm water.

NOTE TO PHYSICIAN: ANTIDOTE—Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine. Azinphos-methyl inhibits cholinesterase, resulting in stimulation of the central nervous system, the parasympathetic nervous system and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

FOR EMERGENCY MEDICAL RESPONSE AND HAZARD COMMUNICATION ONLY, CALL HAZARD INFORMATION SERVICES AT 1(800) 228-5635 EXT. 283.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER-POISON

Fatal if swallowed, inhaled or absorbed through the skin. Do not breathe vapor, dust or spray mist. Do not get in eyes, on skin or on clothing. Keep out of reach of children and domestic animals. Do not contaminate feed or foodstuffs. Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See First Aid section of this label. For questions regarding further treatment or information about the product, call the National Pesticide Telecommunications Network at 1-800-858-7378.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

ACCEPTED

with COMMENTS

In EPA Letter Dated:

Under the Federal Insecticide, Fungicide, and Redenticide Act,

as amended, for the pesticide registered under EPA Reg. No. 10163-78

AUG 23 1999

Airblast applicators must be in fully enclosed cabs or if not in fully enclosed cabs, applicators must wear:

- Chemical resistant suit over long-sleeved shirt and long-legged pants
- · Chemical resistant hood
- Full-face respirator or half-faced respirator with a face shield
- Chemical-resistant footwear plus socks

Applicators (other than airblast) and other handlers (other than mixers and loaders) must wear:

- · Coveralls over long-sleeved shirt and long-legged pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Protective eyewear
- Dust/mist fittering respirator (MSHA/NIOSH approval number prefix TC-21C)

Mixers and Loaders must wear:

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear
- Chemical-resistant apron when mixing or loading
- For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticities (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).
- For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

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

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EPA Reg. No. 10163-78 EPA Est. No. 67545-AZ-1 Cowan Company P.O. Box 5569 Yuma, AZ 85366 Engineering controls statements: HUMAN FLAGGING IS PROHIBITED. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Water-soluble packets, when used correctly, qualify as a closed loading system under the WPS. The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Symptoms of Poisoning: A sense of "tightness" in the chest. Sweating. Contracted pupils. Stomach pains. Vomiting and diarrhea. Treatment: In case of poisoning, call a physician immediately. (See STATEMENT OF PRACTICAL TREATMENT section also.)

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and wildlife. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

This product is highly toxic to bees exposed to direct treatment or residues on crops or blooming weeds. Do not apply this product or allow it to drift to crops or weeds when bees are actively visiting the treatment area. Time applications to provide the maximum possible interval between treatment and the next period of bee activity. Protective information may be obtained from your Cooperative Agricultural Extension Service.

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.

This product may not be reformulated for use on sugarcane, ornamentals. Christmas trees, shade trees, or forest trees.

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 intervals. 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 worker entry into treated areas during the restricted entry interval (REI) listed in the chart below.

CROP	ACTIVITY	REI		
Tree Crops	Hand Thinning	14 days		
	Hand Harvesting	14 days		
	Propping	2 days		
	Mowing	2 days		
	Irrigating	2 days		
	Scouting	2 days		
	Other Activities 2 days			
	(Involving similarly m	ninimal contact with		
	treated foliage.)			

AGRICULTU	RAL USE REQUIREME	NTS (continued)
Citrus	Hand Thinning	30 days
	Hand Harvesting	30 days
	Propping	2 days
	Mowing	2 days
	Irrigating	2 days
	Scouting	2 days
	Other Activities	2 days
	(Involving similarly minus treated foliage.)	nimal contact with
Grapes	Girdling	21 days
•	Cane Throwing	21 days
	Leaf Pulling	21 days
	Cane Cutting	21 days
	Bunch Thinning	21 days
	Hand Harvesting	21 days
	Mowing	2 days
	Irrigating	2 days
	Scouting	2 days
	Other activities	2 days
	(Involving similarly mit	nimal contact with
	treated foliage.)	
All Other Crops	All Activities	4 days
	Mowing	2 days
	Irrigating	2 days
	Scouting	2 days
Cook Adam DCD to the		are to the common the same of

Each 4 day REI is increased to 5 days and each 2 day REI is increased to 3 days in outdoor areas where average rainfall is less than 25 inches a year.

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 over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

MIXING DIRECTIONS

- Packets containing Gowan Azinphos-M 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.
- Turn on spray tank agitation prior to adding water soluble packets.
 Buffer the water in the spray tank before adding Gowan Azinphos-M 50 WSB.
- 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 package dissolution). Where dosages of Gowan Azinphos-M 50 WSB are expressed as fractions of pounds, prepare the tank mix load to the lower of the nearest whole pound.
- 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, *Ldd other chemicals following conventional mixing order practices. *(See section entitled COMPATIBILITY.)
- Tank-mix solutions containing binon will affect the solubility of the water soluble film. Thoroughly rinse the spray tank of any beron containing spray solution prior to adding any water soluble packets. When preparing tank mixes containing boron, add the correct amount of Gowan Azinphos-M 50 WSB to the spray tank first. Make sure that the water soluble packets are coinpletely dissolved. Add boron preparations to the spray tank last because even very low concentrations of boron will inhibit the solubility of the film. Carryover concentrations of boron in the spray tank need to be minimized and may cause dissolved water soluble bag material to precipitate and form insoluble residue in the spray tank system.

SPRAYING

BACKPACK OR HANDHELD SPRAYING IS PROHIBITED.

Prepare water dilutions appropriate for type of equipment used as described in DILUTION DIRECTIONS. When applying, work to windward. Complete coverage and thorough application are essential for most effective results. Schedule applications in accordance with local conditions. Consult your State Agricultural Experiment Station or Extension Service for specific use information in your area.

DILUTION DIRECTIONS

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

Dilute Application

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

Trees and Vines: Apply specified rate in 100 to 800 gals. of water per acre. For citrus, use up to 2,000 gals. of water per acre.

Concentrate Application

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

Trees and Vines: Apply specified rate in 20 to 100 gals, of water per acre.

Special concentrate equipment is-required for these applications.

Air Application

ALL AERIAL APPLICATIONS REQUIRE ENCLOSED COCKPITS.

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

Trees and Vines: Apply specified rate in a minimum of 10 gals, of water per acre. When tank mixing with other products, a premix is suggested to achieve a uniform suspension.

Unless specifically prohibited under a crop recommendation, application to all crops is allowed using ground or air equipment. Follow DILUTION DIRECTIONS above.

REQUIREMENTS FOR REDUCING SPRAY DRIFT

Do not apply under conditions where possible drift to unprotected persons or to food, forage, or other plantings that might be damaged or the crops thereof rendered unfit for sale, use, or consumption can occur.

- For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or rotor diameter.
- 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.
- For aerial applications, spray should be released at the lowest height consistent with efficacy and flight safety. Applications more than 10 feet above the crop canopy should be avoided.
- Make aerial or ground applications when wind velocity favors ontarget product deposition (approximately 3 to 10 mph). Do not apply

when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

- 5. Do not make aerial or ground applications during 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. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
- 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 temperature.
- Do not apply within 150 feet by air or 100 feet by ground of an unprotected person(s) or occupied dwelling.
- All aerial and ground application equipment must be property maintained and calibrated using appropriate carriers.

To address Integrated Pest Management Issues: Local integrated management systems are available for controlling the pests on this label. Such systems include the use of biological control agents, alternative chemicals, and scouting. Consult your local Extension specialist or other consultant for further details.

ROTATIONAL CROPS

Do not plant root crops other than those with registered azinphos-methyl uses in azinphos-methyl treated soil sooner than 6 months after last application. Do not plant any other crop other than those with registered azinphos-methyl uses in treated soil sooner than 30 days after last application.

GENERAL USE PRECAUTIONS AND RESTRICTIONS

Do not use for any food or forage crop not listed on this labeling. Use only according to label directions. Application at rates above those shown may result in illegal crop residues.

COMPATIBILITY: Gowan Azinphos-M 50 WSB is compatible with many registered pesticides and liquid fertilizers. Do not combine with any products unless previous use of the mixture has proven physically compatible and safe to plants. When mixing Gowan Azinphos-M 50 WSB with any other product, add wettable powders or dry flowable formulations first and then add liquid products. If there is any separation, we recommend that combination not be used. Combination should be kept agitated and should be applied immediately. Do not allow combination to sit for prolonged periods in the chemical supply tank or irrigation lines.

Gowan Azinphos-M 50 WSB is compatible with domant and summer oils; these may be added to sprays in accordance with local recommendations.

Do not graze livestock in treated orchards or groves for 21 days after treatment. Where specific grazing restrictions are given for a crop listing, follow these specific directions. USE OF THIS PRODUCT IN GREENHOUSES OR ENCLOSED AREAS IS PROHIBITED.

PREHARVEST INTERVAL

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

RECOMMENDATIONS FIELD CROPS

	ACRE	• • • •
fhopper Ifa Weevit, Egyptian Ifa Weevit Ifa Plant Bug, ahopper, Grasshopper, us Bug, Spittlebug	½ to 1 ¾ to 1½ 1 to 1½	Apply specified dosage per acre by air or ground equipment. Use at least 10 gals, of water per acre with ground equipment and at least 1 gal, of water per acre for aerial application. It may be necessary to use 20 to 25 gals, of water per acre on heavy growth for control of alfaltin webvil or Egyptian alfalfa weevil with ground equipment. For application by irrigation systems, apply the specified dosage per acre. Follow all directions given under the ChiEMIGATION section of this label. Only one application per cutting may be made regardless of rate, formulation, or method of application used.
	lfa Weevil, Egyptian Ifa Weevil Ifa Plant Bug, Ihopper, Grasshopper, us Bug, Spittlebug	Thopper ½ to 1 Ifa Weevil, Egyptian ¼ to 1½ Ifa Weevil Ifa Plant Bug, 1 to 1½ shopper, Grasshopper,

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FIELD CROPS (Continued)

CROP	PEST	LBS./ ACRE	COMMENTS
(Not for Louisiana and states East of the Mississippi River)	Bollweevil	1/4 to 1/4	Apply by ground or air equipment in sufficient water for complete coverage but not less than 5 gals, of water per acre. For season control of pink boltworm1 lb. Cotton receiving late-season applications should not be pastured. A maximum of 4 lbs. per acre may be applied per season.
(7)	Pink Bollworm	1	
REI 48 hours	Brown Cotton Leafworm, Cotton Fleahopper, Cotton Leafworm, Thrips	1/2	
	Rapid Plant Bug, Tamished Plant Bug	1/2 to 1	
	Do not apply within 7 day Hand-picking of cotton is May not be applied by che	prohibited.	then using maximum application rate of 1 pound per acre.

FRUIT

NOTE: When treating fruit during the bloom period, it is recommended that bee keepers be warned well in advance to remove hives a safe distance from

CROP	PEST	LBS./ ACRE	COMMENTS
APPLES, CRABAPPLES, PEARS, QUINCES (14) REI The REI is specified by crop and activity. See the table in the Agricultural Use Requirements section of this label.	Aphid*, Apple Maggot, Codling Moth, European Apple Sawfly, Eyespotted Bud Moth, Forbes Scale, Fruittree Leafroller, Green Fruitworm*, Leafhopper*, Mealybug*, Orange Tortrix, Pear Psylla, Plum Curculio, Putnam Scale, Redbanded Leafroller, San Jose Scale*, Stink Bug, Tarnished Plant Bug*	1½ to 3	(Northeast and North Central States: ½ to 1 lb. per 100 gals. based on 300 gals per acre). Up to 9 lbs. may be applied per crop season. Allow at least 7 days between applications. Gowan Azinphos-M 50 WSB is compatible with dormant and summer oils, which may be added to apple and pear sprays in accordance with local recommendations. A maximum rate of 3 lbs. per application may be used on apples only in conjunction with an IPM program. The PHI for the 3 lb. rate increases to 21 days.
	Do not apply within 14 day Do not apply by 'fixed-wir Do not apply by chemigat	ng" aircraft.	and allow 7 days between applications.
NECTARINES, PEACHES (East of the Rocky Mountains) (21) REI The REI is specified by crop and activity. See the table in the Agricultural Use Requirements section of this label.	Aphid*, Cottony Peach Scale, European Fruit Lecanium Scale, Forbes Scale, Lesser Peachtree Borer, Oriental Fruit Moth, Peach Twig Borer, Platynota Flavidana Leafroller, Plum Curculio, Redbanded Leafroller, San Jose Scale*, Stink Bug, Tarnished Plant Bug*, Terrapin Scale, Thrips, Walnut Scale, White Peach Scale	1% to 2%	(½ to 5/s lb. per 100 gals. based on 300 gals, of water per acre). Apply specified dosage per acre as a full coverage spray. Allow at least 14 days between applications. A total of 6 ½ lbs. per acre per crop season may be applied. For control of peachtree borer, apply 2 or 3 sprays to trunk from ground to scaffold limbs, timed with moth flight. For control of scale, apply when crawlers are present. Gowan Azinphos-M 50 WSB is compatible with dormant and summer oils which may be added to peach sprays in accordance with local recommendations.
	Do not apply by "fixed-wir Do not apply by chemigat	_	
NECTARINES, PEACHES (West of the Rocky Mountains) (21) REI The REI is specified by crop and activity. See the table in the Agricultural Use Requirements section of this label.	Lesser Peachtree Borer, Oriental Fruit Moth, Peach Twig Borer, Peachtree Borer, Platynota Flavidana Leafroller, Plum Curculio, Redbanded Leafroller, Stink Bug, Tarnished Plant Bug	3 to 4	Allow at least 14 days between applications. A total of 6 % lbs. per acre per crop season may be applied. For control of peachtree borer, apply 2 or 3 sprays to trunk from ground to scaffold limbs, timed with moth flight. Gowan Azinphos-M 50 WSB is compatible with dormant and summer oils which may be added to peach sprays in accordance with local recommendations.
specified by crop and activity. See the table in the Agricultural Use Requirements	1		

	· · · · · · · · · · · · · · · · · · ·		UIT (continued)
CROP	PEST	LBS./ ACRE	COMMENTS
SLACKBERRIES,	Leafhopper, Leafroller	1/2	Apply to foliage using sufficient water for good coverage.
OYSENBERRIES,	Leafminer	5/6	
OGANBERRIES,	Aphid*	5/a to 1	
ASPBERRIES	Obscure Root Weevil	1	
See Text for PHI)	 Do not apply within 14 day 	s of harvest.	
REI 48 hours	Do not apply more than two		vn.
	Obscure Root Weevil	1	
	 Do not apply more than tw 	ice per seaso	ነ ጠ.
	Do not apply within 3 day before fruit set or after cro	s of harvest	at rates up to 2 lbs. per acre. Rates above 2 lbs. per acre should only be applied
LUEBERRIES	Blueberry Maggot,	1 to 11/2	Apply specified dosage with aerial or ground equipment using sufficient water for
East of the Rockies)	Fruitworms, Lecanium Scale,	· /-	good coverage. A total of 3 applications may be made per crop season regardless
7)	Plum Curculio		of rate or formulation used. Allow at least 10 days between applications.
Él 48 hours			<u> </u>
HERRIES	Eyespotted Bud Moth,	11/2	Apply as a full coverage spray (or Northeast and North Central States: 1/2 lb. per
5)	Forbes Scale, Fruit Flies,		100 gals, based on 300 gals, per acre). Up to 6 lbs, per acre per crop season may
El The REI is	Fruittree Leafroiler, Lesser		be applied. Allow at least 14 days between applications.
pecified by crop and	Peachtree Borer, Plum		· · · · · · · · · · · · · · · · · ·
ctivity. See the	Curculio, San Jose Scale*.		
ble in the	Cherry Leafminer, Mineola		· ·
gricultural Use	Moth		
equirements			
ection of this label.			
TRUS FRUITS	Aphid*, Black Scale, Brown	21/2-4	Apply specified dosage as a full coverage spray. A total of 2 applications may b
0)	Soft Scale, Chaff Scale		applied per fruit year regardless of rate or formulation used.
El The REI is	Citricola Scale, Citrus Thrips		'' ' ' '
ecified by crop and	Citrus Mealybug,		
tivity. See the	Cottonycushion Scale,		
ble in the	European Brown Snail,		
gricultural Use	Florida Red Scale, Fruittree		
equirements	Leafroller, Fuller Rose		
ection of this label.	Beetle, Glover Scale,		
	Orange Tortrix, Snow Scale,		
	Purple Scale, Western		
	Tussock Moth, Whitefly		
	California Red Scale, Yellow	4	
	Scale		
RANBERRIES	Cranberry Fruitworm,	1 to 2	Apply specified dosage by air or ground equipment using sufficient water for good
21)	Sparganothis Sulfureana,		coverage. For application by imigation systems, apply specified dosage per acre
El 48 hours	Tipworm		Follow all directions given under the CHEMIGATION section of this label. A total of
			3 applications may be made per crop season regardless of rate
	Fireworm	2	or formulation used. Allow at least 14 days between applications.
RAPES	Grape Berry Moth, Grape	1½ to 2	Apply specified dosage per acre as a full coverage spray. A total of 3 application
:1)	Cane Girdler, Grape		may be made per crop season regardless of rate or formulation used. Allow a
El The REI is	Mealybug, Leafhopper*,		least 14 days between applications.
pecified by crop and	Redbanded Leafroller, Thrips		
ctivity. See the			
ble in the			
gricultural Use			
equirements			
ection of this label.			
LUMS, PRUNES	Aphid*, Codling Moth,	1% to 21/2	(1/2 to 5/s lb. per 100 gals, based on 300 gals, per acre). Apply as a full coverage
East of the Rockies)	Eyespotted Bud Moth,		spray. A total of 6% lbs. may be applied per acre per crop season. Allow at least
5) Fithe BCI:	Forbes Scale, Fruittree		10 days between applications. For control of peachtree borer, apply 2 or 3 spray
El The REI is	Leafroiler, Lesser Peachtree		to trunk from ground to scaffold limbs, timed with moth flight, For control of scale
pecified by crop and	Borer, Orange Tortrix,		apply when crawlers are present. Gowan Azinphos-M 50 WSB is compatible with
ctivity. See the	Peachtree Borer, Peach		dormant and summer oils which may be added to prune sprays in accordance wit
able in the	Twig Borer, Plum Curculio,		local customs.
gricultural Use	Redbanded Leafroller, San		(4
loguiromente	I fono Coolot Chiali Diret		
Requirements ection of this label.	Jose Scale*, Stink Bug*, Tarnished Plant Bug*,		

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Tussock Moth American Plum Borer

FRUIT	(Continued)
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	·	FR	(UIT (Continued)			
CROP	PEST	LBS./ ACRE	COMMENTS			
PLUMS, PRUNES (West of the Rockies) (15) REI The REI is specified by crop and activity. See the table in the Agricultural Use Requirements section of this label.	Eyespotted Bud Moth, Fruittree Leafroller, Lesser Peachtree Borer, Orange Tortrix, Peachtree Borer, Peach Twig Borer, Plum Curculio, Redbanded Leafroller, Stink Bug, Tarnished Plant Bug, Tussock Moth American Plum Borer	2 to 4	Allow at least 10 days between applications. A total of 6% lbs. per acre per crop season may be applied to plums and prunes. For control of peachtree borer, apply 2 or 3 sprays to trunk from ground to scaffold limbs, timed with moth flight.			
STRAWBERRIES (5) REI 48 hours	Aphid*, Meadow Spittlebug, Obliquebanded Leafroller, Obscure Root Weevil, Omnivorous Leaftier, Pea Leaf Weevil, Small Black (Grass) Weevil, Strawberry Leafroller, Whitefly	1	Apply specified dosage as a full coverage spray using sufficient water for good coverage. For application by irrigation systems; apply specified dosage per acre. Follow all directions given under CHEMIGATION section of this label. A total of 4 applications may be made per crop season regardless of rate or formulation used. Allow at least 5 days between applications.			
			NUTS			
CROP	PEST	LBSJ ACRE	COMMENTS			
ALMONDS (28) REI The REI is	Peach Twig Borer, Navel Orangeworm	3 to 4	Apply specified dosage by concentrate sprayer or as a full coverage spray, using up to 400 gals, of finished spray per acre. If conditions dictate an aerial spray, apply specified dosage by aircraft in not less than 20 gals, of water per acre.			
Agricultural Use Requirements section of this label.	recommended below: Split Application Spray Schedules #1: Apply 2 lbs. per acre at the onset of hullsplit. Follow 5 to 10 days later by a second 2 lb. treatment. Both applications must be made to achieve control. OR #2: Apply 4 lbs. per acre at the onset of hullsplit to every other row, followed 5 to 10 days later by a 4 lb. per acre spray to the alternate rows. Do not apply more than a total of 4 lbs. of finished product (2# ai) per acre when using these split application schedules. NOTE: To determine the onset of hullsplit, monitor nuts in the top of the canopy. Coverage is critical in the suture area. If split applications, be sure to apply both of the recommended treatments in the selected spray schedule.					
FILBERTS (Pacific Northwest Only) (45)	Do not graze livestock in Apple Mealybug, Filbert Worm, Filbert Aphid, Filbert Leafroller	3 to 4	ds for 21 days after treatment. Apply specified dosage as a full coverage spray. A total of 3 applications may be made per crop season regardless of rate or formulation used. Allow at least 14 days between applications.			
REI The REI is specified by crop and activity. See the table in the Agricultural Use Requirements section of this label.		treated groves	for 21 days after treatment.			
PECANS REI The REI is specified by crop and activity. See the table in the Agricultural Use Requirements section of this label.	Aphid*, Fall Webworm, Hickory Shuckworm, Leafminer, May Beetle, Pecan Casebearer, Southern Green Stink Bug, Spittlebug, Twig Girdler, Walnut Caterpillar	3 to 4	Apply specified dosage as a full coverage spray. A total of 3 applications may be made per crop season regardless of rate or formulation used. Allow at least 7 days between applications. Repeat applications made at less than 14-day intervals are early entry activities.			
	Do not apply after shuck :					
PISTACHIOS	Do not graze livestock in Navel Orangeworm	treated groves 5	for 21 days after treatment. Apply as a full coverage spray, using not more than 500 gals, of finished spray per			
(California Only) (21) REI The REI is specified by crop and activity. See the table in the Agricultural Use		treated orchan	acre. Make one application from bud break to 10% hullsplit.			
Requirements section of this label.		·				

WALNUTS REI The REI is specified by crop and activity. See the table in the	Codling Moth, Filbert Worm, Navel Orangeworm	2 to 4	Apply specified dosage as a full coverage spray. A split application may be necessary for thorough coverage. If a split application is used, apply 2 lbs. per acre using ground equipment to be followed no later than 5 days after by a ground or aerial treatment of 2 lbs. per acre. Allow at least 14 days between the first and the split applications.
Agricultural Use Requirements section of this label.		2 lbs. Gowar	n Azinphos-M 50 WSB per acre per crop season. es for 21 days after treatment.

			VEGETABLES
CROP	PEST	LBSJ ACRE	COMMENTS
BEANS	Leafroller	1/2 to 1	Apply specified dosage in sufficient water for thorough coverage.
SNAP (7) REI 48 hours	Aphid*, Bean Leaf Beetle, Green Cloverworm, Leafhopper, Leafminer, Stink	¾ to 1	
	Bug, Velvet Bean Caterpillar Mexican Bean Beetle, Spotted Cucumber Beetle, Striped Cucumber Beetle, Tamished Plant Bug, Western Striped Cucumber Beetle	1	
	Do not exceed 4 applicati Do not feed or ensile treated.		
BROCCOLI (15), BRUSSELS SPROUTS (7),	Aphid*, Cabbage Looper, Diamondback Moth, Imported Cabbageworm	1 to 11/4	Apply specified dosage in sufficient water for complete coverage.
CABBAGE (Includes	 Do not exceed more than 	3 applications	per season.
tight heading varieties of Chinese	Cabbage Maggot	1/4 to 3/8	Mix specified dosage in 50 gals, of water. Apply 4 to 6 ounces of this emulsion per plant at or immediately after transplanting
Cabbage) (21), CAULI-FLOWER (15) REI 48 hours	Cabbage Maggot (Direct Seeded Fields In California Only)	1½	Apply specified dosage in sufficient water for uniform distribution. Mix in upper 2 inches of soil prior to seeding or spray in the seed row at planting time. Usually 2-3 additional sprays are necessary during the growing season depending on time of year and maggot populations.
	Do not apply within 21 da Do not exceed more than Cabbage Maggot (Transplant Fields In California Only) Do not apply within 21 da Do not exceed more than	three applicat 1½ ys of harvest.	Use in 300 to 400 gals, of water per acre as a soil drench in rows when damage first appears. Additional applications may be necessary.
CELERY (14)	Aphid*, Leafminer,	1	Use in 100 gals, of water as a full coverage spray** using not more than 200 gals.
REI 48 hours	Leafhopper, Spittlebug, Tarnished Plant Bug*	,	of finished spray per acre. Repeat as necessary.
	Do not exceed more than	3 applications	
CUCUMBERS (2) REI 48 hours	Spotted Cucumber Beetle, Striped Cucumber Beetle, Western-Striped Cucumber Beetle	1	Apply in sufficient water for complete coverage. Allow at least 7 days between applications. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. A total of 3 applications may be made per crop season regardless of rate, formulation or method of application used.
EGGPLANT (21)	Leafminer	% to 1	Apply in sufficient water for complete coverage. Repeat as necessary but do not
REI 48 hours	European Corn Borer, Flea Beetle	1	exceed 3 applications per crop season regardless of rate, formulation or method of application used and allow at least 7 days between applications. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	 Do not apply after fruit set 	or within 21 c	days of harvest.
ONIONS, GREEN (7), DRY(28) REI 48 hours	Thrips	1 to 1½	Apply in sufficient water for complete coverage. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. Allow at least 7 days between applications for dry bulb onions and at least 10 days between affolications for green onions.
	Do not apply more than 3	times per cro	<u> </u>
PEPPERS (7) REI 48 hours	Leafminer European Com Borer, Flea Beetle	% to 1	Apply in sufficient water for thorough coverage. For application by impation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. A total of 3 applications can be made per crop season. Allow at least 7 days between applications.

CROP	PEST	LBS./ ACRE	COMMENTS
POTATOES (7)	Colorado Potato Beetle*	ACRE 3/4	Apply in sufficient water for complete coverage. For application by irrigation
REI 48 hours	Banded Cucumber Beetle, Leafminer	% -1	systems, apply specified dosage per acre. Follow all directions given under CHEMIGATION section of this label. A total of 3 applications may be made
	European Corn Borer, Flea Beetle, Leafhopper, Spittlebug, Tarnished Plant Bug	1 - 11/2	crop season regardless of rate, formulation or application method used. Allow at least 7 days between applications.
	Tuberworm	11/8 -11/2	<u></u>
SPINACH (14)	Aphid*, Leafminer, Mite*	% to 1	Apply in sufficient water for complete coverage
REI 48 hours	 Do not exceed more than 	3 applications	s per season.
TOMATOES (See	Colorado Potato Beetle*	3/4	Apply in sufficient water for complete coverage. A total of 4 applications may be
Text for PHI) REI 48 hours	Banded Cucumber Beetle, Drosophila, Green Stink Bug, Leafminer, Whitefly	% to 1	made per crop season regardless of rate, formulation or method of application used. Allow at least 7 days between applications. The high rates should be used where heavy infestations of late instar lepidopterous larvae (large worms) and
	Aphid*, European Corn Borer, Flea Beetle, Grasshopper, Leafhopper, Thrips	1 to 11/2	harvest. Rates above 1½ lbs. per acre require an interval of 14 days betwee application and harvest. For application by irrigation systems, apply sp dosage per acre. Follow all directions given under the CHEMIGATION see
	Tuberworm	11/8 to 11/2	this label
	Corn Earworm, Fruitworm, Pinworm, Yellowstriped Armyworm, Hornworm	1½ to 3	
	Transporting Francisco	l	MELONS
CROP	PEST	LBS./	COMMENTS
		ACRE	OSMM21110
MELONS	Leafhopper, Leafminer	% to 1	Apply in sufficient water for complete coverage. A total of 3 applications may be
(Honeydew Melons,	Rindworm, Spotted	1	made per crop season. Allow at least 5 days between applications. For
Muskmelon,	Cucumber Beetle, Striped		application by irrigation systems, apply specified dosage per acre. Follow all
Cantaloupe, Watermelons, and other Melons) (7) REI 48 hours	Cucumber Beetle, Western Striped Cucumber Beetle		directions given under the CHEMIGATION section of this label.
		(DRNAMENTALS
CROP	PEST	LBS.	COMMENTS
SOUTHERN PINE SEED ORCHARDS (Except California) REI 48 hours	Coneworm, Seedworm	3	Use 0.2% dilution as a full coverage spray." Use 1% dilution for low volume sprayers. Apply first application within 30 days following conelet closure, followed by 3 to 5 applications (at least 30 days apart). Apply approximately 5 to 10 gals. of the 0.2% dilution with high volume sprayers or approximately 1 to 2 gals. of the 1%

*In some areas, these species may have developed resistance to organophosphate insecticides. Gowan Azinphos-M 50 WSB used alone may not provide satisfactory control in those areas. Consult your local agricultural advisor or Cooperative Extension Service for recommendations.

**This dosage is calculated for conventional hydraulic-type sprayers. When lower volumes of spray are applied per acre with concentrate sprayers, increase the concentration of Gowan Azinphos-M 50 WSB in the spray mixture in order to apply amount of product per acre equivalent to a full coverage spray. See DILUTION DIRECTIONS for water dilution guidelines.

GENERAL CHEMIGATION INSTRUCTIONS

Application by chemigation is prohibited on pome fruit, peaches, and cotton.

Gowan Azinphos-M 50 WSB may be applied through recommended types of irrigation systems to many crops. If application by chemigation is not listed in the remarks section for a crop, Gowan Azinphos-M 50 WSB may not be applied to that crop through irrigation systems.

Apply this product only through sprinkler, including center pivot, lateral move, side roll, overhead solid set, or low pressure sprinkler irrigation systems. Do not apply this product through any other type of irrigation system.

The irrigation system must provide uniform distribution of treated water. Crop injury, tack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

The system must be calibrated to uniformly apply the rates specified for chemigation application for specific crops. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

dilution with low volume sprayers per tree. May be applied through aerial application only at a maximum rate of 3 lbs. per acre, with no more than 3 applications per year and a total annual maximum of 9 pounds per acre. Thorough

coverage of cones is necessary for maximum control.

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.

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

REQUIRED SAFETY SYSTEM DEVICES

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 imigation system is either automatically or manually shut down.

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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.

USING WATER FROM PUBLIC WATER SYSTEMS

DO NOT APPLY GOWAN AZINPHOS-M 50 WSB THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. 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.

Gowan Azinphos-M 50 WSB may be applied through any of the recommended types of irrigation systems which may be supplied by a public water system only if the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements:

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

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

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

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.

POSTING

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any location affording maximum visibility to the sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2½ inches tail, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER. These signs are in addition to any sign posted to comply with the Worker Protection Standard.

When mixing with other chemicals, refer to COMPATIBILITY section elsewhere on this label.

For application of Gowan Azinphos-M 50 WSB alone, a chemical supply tank is necessary for premixing. For application of Gowan Azinphos-M 50

WSB alone or in combination with liquid fertilizer or other chemicals, constant strong mechanical or hydraulic agitation must be maintained in the chemical supply tank during the entire period of application.

When a chemical supply tank is used, you must determine the required amounts of Gowan Azinphos-M 50 WSB to mix in the tank.

The amount of Gowan Azinphos-M 50 WSB needed equals the number of pounds of Gowan Azinphos-M 50 WSB to be applied per acre multiplied by the number of acres to be chemigated.

The amount of solution needed equals the gallons of solution delivered per hour by the injection pump multiplied by the number of hours chemigation will take place. For example, if you want to apply 2 pounds of product per acre to 130 acres in 20 hours and your injection pump delivers 15 gallons per hour, you need: 2 pounds of Gowan Azinphos-M 50 WSB per acre x 130 acres = 260 pounds of Gowan Azinphos-M 50 WSB. And, you need: 15 gallons per hour x 20 hours = 300 gallons of suspension = 300 gallons of water.

In order to accurately apply pesticides, the chemical injection system must be kept clean; free of chemical or fertilizer residues and sediments. Refer to your owners manual or ask your equipment supplier for cleaning procedures for your injection system.

At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

SPRINKLER IRRIGATION SYSTEMS

All directions and requirements under the GENERAL DIRECTIONS must be followed for sprinkler irrigations systems.

In addition, the following directions apply to sprinkler irrigation systems: Do not apply when wind speed favors drift beyond the area intended for treatment.

It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps, and system safety devices be plugged to prevent chemical contamination of these areas.

Center-Pivot and Automatic-Move Linear Systems

Inject the specified dosage per acre continuously for one complete revolution or move of the system. Do not use end guns. For a foliar application, the system should be run at maximum speed. For a soil application, the system should be run at a slower speed with application in at least ¼ inch of water.

Solid Set and Manually Controlled Linear Systems

For foliar application, injection should be during the last 30 to 60 minutes of regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation. For soil treatment, application should be in at least ½ inch of water. Do not use end guns.

STORAGE AND DISPOSAL

Store in a cool, dry place below 120°F. Do not store next to herbicides. DO NOT CONTAMINATE water, food or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL CHEMTREC (800) 424-9366.* * * * *

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

NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made us to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assome all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other material.

EPA Text Pending: Azinphos-M 50 WSB (to EPA 08/02/99 for crop deletions)