19 2M



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

10163-138

JAN 28 1994

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

BETHANY G. HULCY GOWAN COMPANY P.O. BOX 5569 YUMA, AZ. 85366

Subject: Label Amendment Submission of 09/22/93 In Response to PR Notice 93-7 EPA Reg. No. 10163-138 GOWAN AZINPHOS M 35 WP

IMPORTANT NOTICE: This Letter Requires You to Submit a Notification to the Office of Compliance Monitoring within 20 Days.

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments listed on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

SERIOUS ERROR(S) ON SUBMITTED LABELING:

EPA has determined that one or more of the errors on the labeling you submitted to the Agency is categorized as "serious" as defined in PR Notice 93-11. In general, serious errors are those that may create a potential for harm to workers, handlers, other persons, or the environment; or those that prevent the achievement of the basic goals of the Worker Protection Standard (WPS) or FIFRA.

YOU MUST NOT SELL OR DISTRIBUTE (INCLUDING RELEASE FOR SHIPMENT) ANY PRODUCT BEARING THE SUBMITTED LABELING. Sale or distribution of any product with the incorrect labeling is a violation of FIFRA that could result in initiation of an action for civil penalties and/or cancellation of your product. This matter has been referred to the Office of Compliance Monitoring (OCM) for further action.

YOU MUST SUBMIT A NOTIFICATION TO THE OFFICE OF COMPLIANCE MONITORING WITHIN 20 DAYS OF THE DATE OF THIS LETTER.



Page 2

Each notification must include the following information:

- 1. Registrant's name and address.
- 2. EPA Registration number of the product for which the labeling was submitted.
- 3. Whether any product already has been sold or distributed (this includes released for shipment) bearing the submitted labeling.

In addition, the notification must include the following information, IF you have already sold or distributed any product bearing the submitted labeling:

- 1. Quantity of the product that has been sold or distributed.
- 2. EPA Producing Establishment number.
- 3. Location of the product, if known.
- 4. Proposed plan for assuring that product with the incorrect labeling in your control, as well as that in the hands of dealers/distributors/users, will be corrected. The plan must include your proposal for assuring that the labeling is corrected as soon as possible.

Submit the notification to:

Michael Wood, Director Compliance Division, (7203) Worker Protection Notification Office of Compliance Monitoring U.S. Environmental Protection Agency 401 M Street SW Washington, DC 20460

Failure to submit a notification also may result in initiation of an action under FIFRA for civil penalties, if you sold or distributed (this includes released for shipment) product bearing the incorrect labeling. 20

IN ADDITION, YOU SHOULD CONTACT IMMEDIATELY THE PERSONS TO WHOM YOU SOLD OR DISTRIBUTED YOUR PRODUCT AND INFORM THEM NOT TO SELL OR DISTRIBUTE ANY PRODUCT WITH THE INCORRECT LABELING.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the WPS labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have neither been reviewed nor accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Submit the required notification. Then by the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

 BEFORE selling or distributing any product bearing the final printed labeling as amended

AND

WITHIN one year from date of this acceptance.

Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL) Office of Pesticide Programs (7505C) U.S. Environmental Protection Agency 401 M Street, SW Washington, D.C. 20460-0001

Page 3

Page 4

Hand or courier deliveries of final labeling may be made to:

Document Processing Desk (FIN-LABEL) Office of Pesticide Programs Room 266A, Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Sincerely,

Jim Tompkins, Deputy Chief Registration Support Branch Registration Division (7505W) 7 20

4

Attachment

cc: Office of Compliance Monitoring

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division 20

Bethany G Hulcy GOWAN CO BOX 5569 YUMA AZ 85366

Comment for: EPA Reg Nr.10163-138 GOWAN AZINPHOS M 35 WP

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

Add the following statement to the "Personal Protective Equipment" section on your proposed labeling immediately following the statement requiring an enclosed cab: "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." The exact location is shown in Section A of Part 1 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Delete the crossed-out statements on your proposed label. They are redundant statements or phrases.

Correct the typographical errors circled on your proposed label.

The eyewear requirement for applicators and other handlers and early entry in the Agricultural Use Requirements Box on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Protective Eyewear". The exact location is shown in Section F & G on Part 2 of the Product Worksheet in Supplemental Three-A to PR Notice 93-7.

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 35 WP

ACTIVE INGREDIENT:

O,O-dimethyl S-((4-oxo-1,2,3-benzotriazin-3 (4-H)-yl) methyl) phosphorodithioate	35.0%
INERT INGREDIENTS	<u>65.0%</u>
	100.0%

ACCEPTED THE COMMENTS In DA Letter Dated

KEEP OUT OF REACH OF CHILDREN

Under the Valgral Insenticide. Fundiaide, and Radanticide An a assended, for the pesticide An registered under EPA Reg. No. 10163-135



POISON

20

PELIGRO

Si usted no entiende la etiqueta, busque a aluien 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 of 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 conduction with atropine. Azinphosmethyl 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 is 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.

Net Weight _____ Pounds Contains _____ 1 3/8 pound water soluble packets



EPA Reg. No. 10163-138 EPA Est. No. 10163-AZ-1 Gowan Company P.O. Box 5569 Yuma, AZ 85366-5569

Page 2 of 15

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. Keep all unprotected persons, children, livestock, and pets away from treated areas or where there is a danger of drift. Do not rub eyes or nouth with hands. If you feel sick in any way STOP work and get help right away. See First Aid section of the label. For questions regarding further treatment, or information about the product, call the National Pesticide Telecommunications Network at 1-800-858-7378.

PERSONAL PROTECTIVE CLOTHING (PPE)

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

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Dust/mist filtering 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 evewear
- 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 pesticides (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 such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statements: 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. ed c.(D)

During aerial application, human flaggers are prohibited unless in totally enclosed vehicle.

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.)

3 20

USER SAFETY RECOMMENDATIONS

User 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. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). 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.

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 exception 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). Each 48hour REI is increased to 72 hours in outdoor areas where average rainfall is less than 25 inches a year. Exception: If the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

Page 4 of 15

9

9 20

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.

DIRECTIONS FOR USE OF WATER SOLUBLE BAGS

10 9 20 Page 50F15

Packets containing Gowan Azinphos-M 35 WP are water soluble. Do not allow the packet to get wet prior to adding to spray tank. Do not handle with wet hands. Reseal outer bag to protect remaining packets.

To prepare a spray mixture, determine the number of water soluble packets required from the "Recommendations" below. Drop the required number of packets into the spray tank; operate the agitator while adding azinphos. Depending on the water temperature and the degree of agitation, the packets should dissolve in approximately five minutes.

Use the specified dosage of Gowan Azinphos-M 35 WP in water as determined in "DILUTION DIRECTIONS" below. Calculate the total amount of Gowan Azinphos-M 35 WP required for the acreage to be treated. For each 1-3/8 pounds of wettable powder to be added to the spray tank, use one 1-3/8 pound packet. For example, if 2-3/4 pounds of powder are to be added to the spray tank, use two 1-3/8 pound packets.

SPRAYING

Prepare water dilutions appropriate for type of equipment used as described above and in DILUTION DIRECTIONS. When applying, work to windward.

When low volumes of spray are applied, 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 therefore intended to cover a broad range of applications.

Dilute Application

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

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

Concentrate Application

Ground Application: Apply specified rate in not less than 5 gallons of water per acre.

Trees and Vines: Apply specified rate in 20 to 100 gallons of water per acre. Special concentrate equipment is required for these applications.

11 9 20 Page 6 of 15

BEST AVAILABLE COPY

Air Application

Field and Row Crops: Apply specified rate in a minimum of 3 gallons of water per acre. Trees and Vines: Apply specified rate in a minimum of 10 gallons of water per

acre.

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 the 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.

۰.

Gowan Azinphos-M 35 WP is compatible with dormant and summer oils; these may be added to sprays in accordance with local recommendations. Do not use oils within 30 days of sulfur or lime sulfur treatment.

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.

Do not treat food crops grown in the greenhouse.

Rates are given in pounds of Gowan Azinphos-M 35 WP per acre (lbs./A) (except for certain soil drench applications and ornamental applications). Applications should be made when pests appear and repeated as necessary. However, where the recommendations list a maximum number of treatments per season, applications must not exceed this number.

CHEMIGATION

Gowan Azinphos-M 35 VP may be applied through recommended types of irrigation systems to many crops. The REMARKS section for each crop list the types of applications allowed. If application through irrigation systems is not listed in the REMARKS section for a crop, Gowan Azinphos-M 35 WP may not be applied to that crop through irrigation systems.

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.

Types of Irrigation Systems

Apply Gowan Azinphos-M 35 WP only through sprinkler, including center pivot, lateral move, side roll, overhead solid set, or low pressure sprinkler irrigation systems. Do not apply GUTHION 35% Wettable Powder through any other types of irrigation systems

GENERAL DIRECTIONS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS

Uniform Water Distribution and System Calibration

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

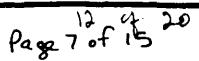
The system must be calibrated to uniformly apply the rates specified for chemigation application for specific crops. If you have question about calibration, you should contact State Extension Service specialist, equipment manufacturers or other experts.

Chemigation Monitoring

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

Drift

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



BEST AVAILABLE COPY

Required System Safety Devices

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

The pesticide Injuction 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 when 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

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 services an average of at least 25 individuals daily at least 60 days out of the year.

THROUGH ANY IRRIGATION SYSTEM SUPPLIED BY A PUBLIC WATER DO NOT APPLY Gowan Azinohos-M 35 WP SYSTEM UNLESS the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

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 no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

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

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

Posting Requirements *

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 residentia. 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 or retail greenhouses.

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 other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive areas. 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 2% inches tail, and all letters and the symbol shall be a color which sharply contrasts with the 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 drame ter 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. Compatibility

When mixing with other chemicals refer to Compatibility section elsewhere on tabel.

Agitation

For application of Gowan Azinphos-M 35WP, a chemical supply tank is necessary for premixing. For application of Gowan Az inplus=115WP 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.

Chemical Supply Tank Dilution

You must determine the required amounts of Gowarn, Az Employee M. 35, will to mix in the tan-

The aniount of Gougon Az Employ-MIRS With needed equals the number of pounds of Given in Mathematical With to the applied per acre multiplied by the number of acres to be chemigated.

page 8 . F 15 7 20

The amount of solution needed equals the gallons of solution delivered per hour by the injection pump multiplied by the number of hour chemigation will take place

For example, if you want to apply 2 pounds of Gowan Azinphos-M 35 WP per acre to 130 acres in 20 hours and your injecticpump delivers 15 gallons per hour, you need: 2 pounds Gowan Azinphos-M 35 WP per acre X 130 acres = 260 pounds c Gowan Azinphos-M 35 WP And, you need: 15 gallons per hour X 20 hours = 300 gallons of suspension = 300 gallons of water

Cleaning the Chemical Injection System

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 procedure for your injection system.

Flushing the Irrigation 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.

Equipment Area Contamination

It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices by 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.

Solid Set and Manually Controlled Linear Systems

For toliar application, injection should be during the tast 30 to 60 minutes of regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation. DO NOT USE END GUNS

RECOMMENDED APPLICATIONS

	Mexican bean beetle	17 10 2%	season
Soybeans REI 48 hours	AphidsLeaf minersBean leaf beetleLeaf rollersGreenStink bugscloverwormVelvet beanLeafhopperscaterpitar	1 to 1%	Apply specified dosage per acre in sufficien water to give complete coverage. Do not apply within 45 days of harvest. Do not graze or feed treated vines to livestock. Do not exceed more than 3 applications pe
Barley Oats Rye Wheat REJ VB hours	Cereat leaf beetle	1 to 174	Apply specified dosage per acre in sufficient water for complete coverage. Do not apply more than once per season. Do not harvest for food, feed, forage or graze within 30 days of treatment
Birdsfoot trefoil (East of the Mississippi River only) Clover	Egyptian alfaffa weevil Alfalfa plant bug Fleahopper Grasshoppers Lygus bugs Spittlebug	11/16	1 gallon of water per acre for aerial application It may be necessary to use 20 to 25 gallons of water per acre on heavy growth for contro- of alfalfa weevil or Egyptian alfalfa weevil with ground equipment. For application by irriga- tion systems Apply specified dosage per acre Follow all directions given under the CHEMI- GATION section of the label. Only one application per cutting may be made regardless of rate, formulation or method of application used. Do not apply within 14 days of harvest at the rates of 1% to 1% pounds per acre or within 16 days of harvest at the rate of 1% pounds per acre
Alfalfa	Alfalla weevil	1% 101%	equipment. Use at least 10 gallons of water per acre with ground equipment and at least
FIELD CROPS	Leathoppers	Azinphos-M	
CROP	PEST	Pounds Gowan	REMARKS

· ·				page 9 of 15 20
CROP		PEST (Pounds Gowan Azin 35 WP	Hos-M REMARKS
FRUIT	NOTE. It is suggeste advance to semove t	d that when treating fruit d nives a sale distance from	uring the bloom orchargs to be t	n period. bee keepers should be warned well in realed. Do not graze livestock in
Apples Crab apples Pears REI 4 1 hours	Aphids* Apple maggol Codling moth European apple sawfly Eye-spotted bud moth Forbes scale Fruit tree leaf roller Green fruitworm* Leathoppers*	Mealybug* Orange tortrix Pear midge Plum curculio Putnam scale Redbanded leaf roller San Jose scale* Stink bug Tarnished plant bug*	21 day 21% to 4% (1% to 1% pounds per 100 gallons)	Apply specified dosage per acre by air or ground equipment in sufficient water for onod cover- age. Up to 17% pounds Gowan Azinphos-1 may be applied per crop season. Allow at least 7 days between applications and 7 days between last application and harvest Gowan Azinphostics compatible with dor-
Cherries REE 43 hours	Eye-spotted bud moth Forbes scale Fruit flies Fruit tree leaf roller	Cherry leaf miner Mineola moth Lesser peach tree borer Plum curculio San Jose scale*	2¼ (¹ ¼4 pound per 100 gallons)	Apply specified dosage per acre as a full cov- erage spray. Up to 8½ pounds of Gowan Azi: phos-N ³⁵ may be applied per acre per crop season Allow at teast 14 days between applications and 15 days between last application and harvest. California: Apply post-harvest only.
		BEST AVAILABL	LE COPY	Apply specified dosage per acre as a full cov- erage spray. Allow at least 14 days between
Apricots Nectarines Peaches (Eastern U.S.) REI 48 hours	Aphids* Cottony peach scale European fruit lecanium scale Forbes scale Lesser peach tree borer Oriental fruit moth Peach tree borer Peach twig borer	Platynota flavedana leaf roller Plum curculio Redbanded leaf roller San Jose scale* Stink bug Thrips Tarnished plant bug Terrapin scale Walnut scale White peach scale	2% to 3% (% to % pound per 100 gallons)	applications. A total of 9% pounds per acre per crop season may be applied to nectarines. A total of 12 ¹ % pounds per acre per crop season may be ap- plied to apricots and peaches. Allow at least 21 days between last application and harvest. For control of peach tree borer, apply 2 or 3 sprays to trunk from ground to scalfold limbs, timed with moth flight. For control of scale, apply when crawlers are present. Nowan Azinphos-Ns compatible with dor- mant and summer oils which may be added to peach sprays in accordance with local recommendations.
Apricols Nectarines Peaches (West of the Rocky Mountains) RET 48 heers	Lesser peach tree borer Oriental fruit moth Peach twig borer Peach tree borer Platynota Navedana leaf roller	Plum curculio Redbanded leaf roller Stink bug Thrips Tarnished plant bug	4% 10 5'%	Apply specified dosage per acre. Allow at least 14 days between applications. A total of 9% pounds per acre per crop season may be applied to nectarines. A total of 12% pounds per acre per crop season may be ap- plied to apricots and peaches Allow at least 21 days between last application and harvest For control of peach tree borer, apply 2 or 3 sprays to trunk from ground to scalfold limbs, timed with moth flight

*In some areas, these species may have developed resistance to organophosphate insecticides. A insecticide used alone may not provide satisfactory control in those areas. Consult your local agricultural advisor or cooperative extension service for recommendations.

page 10 of 15 of 20

CROP	P	EST	Pounds rowan Az-rha-1 35 WP	REMARKS
FRUIT (cont'd) Plums Pluncs (Eastern U S) REI 48 hours	Aphids* Codling moth Eyespotted bug moth Forbes scale Fruit tree leat roller Lesser peach tree borer Orange tortrix	Peach tree borer Peach twig borer Plum curculio Redbanded leaf roller San Jose scale* Stink bug Tarnished plant bug* Tussock moth	2½ to 3% (1½ to % pound per 100 gallons)	Apply specified dosage per acre as a full cov- erage spray A total of 9% pounds per acre per crop season may be applied to plums and prunes Allow at least 10 days between applications Allow at least 15 days between last application and harvest. For control of peach tree borer, apply 2 or 3 sprays to trunk from ground to scalloid limbs, timed with moth flight
	American plum borer		4%	For control of scale, apply when crawlers are present. Known Aling and #SWP is compatible with dor- mant and summer oils which may be added to prune sprays in accordance with local rec- ommendations.
Plums Prunes (West of the Rocky Mountains) ZET 47 hours	Codling moth Eye-spotted bug moth Fruit tree leaf roller Lesser peach tree borer Orange tortrix Peach tree borer	Peach twig borer Pium curculio Redbanded leaf roller Stink bug Tarnished plant bug [*] Tussock moth	2"¥is t0 5"%is	Apply specified dosage per acre. A total of 9% pounds per acre per crop season may be applied to plums and prunes. Allow at least 10 days between applications. Allow at least 15 days between last application and harvest. For control of peach tree borer, apply 2 or 3 sprays to trunk from ground to scalfold limbs timed with moth flight.
	American plum borer		4% 10 51%	
	Leafhoppers	Leaf rollers	٧.	Apply specified dosage per acre to foliage us
	Leaf miners Aphids		"∕₄	ing approximately 200 gallons of water for good coverage. Do not apply more than twice pe
			% 10 1¥	season nor within 14 days of harvest
Blackberries	Obscure root weevil	· ·	11/0	1
Boysenberries Loganberries Raspberries KET 48 hmrs	Obscure root weevil		136	For control of root weevils prior to harvest ap ply specified dosage per acre to lower portion of canes and to the soil beneath the plant using approximately 200 gallons of water. Do not apply more than twice per season. Do no make applications within 3 days of harvest a rates up to 2% pounds per acre.
Blueberries (Eastern and North Central Stales only) REJ 41 heurs	Blueberry maggot Fruitworms Lecanium scale Plum curculio		1% 10 2%	Apply specified dosage per acre with aerial of ground equipment using sufficient water for good coverage. A total of 3 applications may be made per cro season regardless of rate or formulation used Allow at least 10 days between application and at least 7 days between last application and harvest.

.

-

*In some areas, these species may have developed resistance to organophosphate insecticides Asinghear A insecticide used alone may not provide satisfactory control in those areas. Consult your local agricultural advisor or cooperative extension service for recommendations



CROP	PEST		Pounds Tanar Hurphis 35 WP	- Page 11 of 15 REMARKS 16 7 20
FRUIT (cont'd) Cranberries	Crantumy fruitworni Sparganothis sultureana Tipworm		174 10 2444	Apply specified detaile per actor by air using sufficient water for good coverage. For appli- cation by irrigation systems. Apply specified details are follow all displayed and
REI 48 hours	Fireworms		21410	dosage per acre Follow all directions given under the CHEMIGATION section of the label. A total of 3 applications may be made per crop season regardless of rate or formulation used. Allow at least 14 days between applications and at least 21 days between last application and harvest.
Citrus Fruits REL 7 days	Aphids* Black scale Brown soft scale Chall scale Citricola scale Citricola scale Citrus mealybug Citrus thrips Cottony-cushion scale European brown snail	Florida red scale Fruit tree leaf roller Fuller rose beetle Glover scale Orange tortrix Purple scale Snow scale Western tussock moth Whiteflies	5 ¹ 1/16 to 81/2	Apply specified dosage per acre as a full coverage spray. A single application per year may be applied up to within 7 days of harvest. Where 2 applications are required, allow at least 28 days between the second application and harvest. A total of 2 applications may be applied per fruit year regardless of rate or formulation used.
	California red scale	Yellow scale	8%	
Grapes REI 48 haurs	Grape berry moth Grape cane girdlers Grape mealybug Lealhoppers*	Redbanded leaf roller Thrips Grape leaf skeletonizer	2½ to 2¾.	Apply specified dosage per acre as a full cov- erage 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. Minimum dosage specified may be applied up to harvest. With higher rates allow at least 10 days between last application and harvest.
Strawberries, REI 48 hows	Aphids" Meadow spittlebug Oblique-banded leaf roller Obscure root weevil Omnivorous leaf tier	Pea leaf weevil Small black (grass) weevil Strawberry leaf roller Whitefly	11/14	Apply specified dosage per acre as a full cov- erage spray using sufficient water for good coverage. For application by irrigation sys- tems: Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of the 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 and at least 5 days between last application and harvest.
NUTS Almonds FEI 48 havis	Peach twig borer Navel orangeworm		4% to 5%	Apply specified dosage per acre. A total of 2 applications may be made per crop season regardless of rate or formulation used. Allow at least 30 days between applications and at least 60 days between last application and harvest. Do not apply after husks split
	BE	ST AVAILABLE CO		CALIFORNIA CMLT: Apply specified desage per acre by concentrate sprayer or as a full coverage spray usin not more than 400 gallons of finished spray per acro If conditions dictate an aerial spray, apply specified desage by aircraft in met less than 20 gallons of water per acre. Application is limited to one dormant spray and/or two postblown sprays per season. Lost application may be made up to 20 days before harvest. Allow at least 120 days between the dormant and the first pest-blown spray. Do not grave livestock in treated groves for 21 days after prostment.

"In some areas, these species may have developed resistance to organophosphate insecticides Arays, in insecticide used alone may not provide satisfactory control in those areas. Consult your local agricultural advisor or cooperative extension service for recommendations

CROP	PEST	Pounds Taine An Arm 35 WP	Page (Z of 15 17 0 00 HEMARKS
NUTS (cont'd) Filberts (Pacific Northwest only) REL 49 hour	Apple mealybug Filbertworm Filbert aphid Filbert leaf roller	4% to 5%	Apply specified dusage per acte 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 and at least 30 days between last application and harvest. Do not graze livestock in treated groves for 21 days after treatment.
Pecans REI 48 hours	Aphids* Southern green Fall webworm slink bug Hickory shuckworm Spittlebugs Leafminers Twig girdlers May beetles Walnut caterpillars Pecan casebearer	4% 10 5!%4	Apply specified dosage per acre as a full cov- erage 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. Do not apply after shuck split. Livestock may be grazed in treated groves after a 21-day post-treatment interval.
			bo not appry within 21-days/of har bo not appry approximate har bo not approximate har bo not approximate har bo not approximate har bo not approximate har bo not approximate
Walnuts REI 41 hours	Codling moth Walnut husk fly Filbertworm Red-humped Navel orangeworm caterpillar	4% to 5%	Apply specified dosage per acre as a full cov- erage 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. Do not apply after husks split. Do not graze livestock in treated groves for 21 days after treatment
VEGETABLES Artichokes REI 48 hours	Plume moth BEST AVAILABLE CO	IPY 1%	Apply specified dosage per acre 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 the label. A total of 3 applications may be made per crop season regardless of rate, formulation or method of application used. Allow at least 14 days between applications and at least 20 days between last application and harvest. Do not leed or envile treated forage
	Leaf rollers Mites	% 10 1 %	
Beans	AphidsLeafhoppersBean leafLeaf minersbeetleStink bugsGreenVelvet beancloverwormcaterpillar	' 10 1%	Apply specified dosage per acre in sufficient water for complete coverage. Do not apply to shap beans within 7 days of harvest nor to dry
(Dry and Snap)	Mexican bean Tarnished beetle plant bug Spotted cucumber Western-striped beetle cucumber beetle Striped cucumber beetle	1%	beans within 30 days of harvest. Do not ex- ceed 4 applications. Do not feed or ensite treated forage

.

"In some areas, these species may have developed resistance to organophosphate insecticides A1...pha+A1 insecticide used alone may not provide satisfactory control in those areas. Consult your local agricultural advisor or cooperative extension service for

			Page 13 of 15
CROP	PEST	Pounds Lewan Norry hai 35% WP	
VEGETABLES (cont'd)	Aphids Cabbage looper Diamondback moth Imported cabbageworm	1¥6 to 2%	Apply specified dosage per acre in sufficient water for complete coverage. Do not apply within 7 days of harvest for Brussels sprouts, 15 days of harvest for broccoli and cauliflower, nor within 21 days of harvest for cabbage. Do not exceed more than 3 applications per season.
Broccok Brussels Sprouts	Cabbag e maggot	% 10 %	Mix specified dosage in 50 gallons of water. Apply 4 to 6 ounces of this emulsion per plant at or immediately after transplanting
Cabbage (Includes tight heading varieties of Chinese c2bbage) Cauliflower	Cabbage maggot (Direct seeded fields in California only)	2%	Apply specified dosage per acre 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 additional sprays are necessary during the growing sea- son, depending on time of year and maggot population. Do not apply within 21 days of har- vest. Do not exceed more than 3 applications per season.
REI 48 hours	Cabbage maggot (Transplant fields in California only)	2%	Apply specified dosage in 300 to 400 gallons of water per acre as a soil drench in rows when damage first appears. Additional applications may be necessary. Do not apply within 21 days of harvest. Do not exceed more than 3 appli- cations per season.
Blackeyed peas (Southern peas.	Corn earworm Cowpea curculio	21/4 10 21/4	Apply specified dosage per acre in sufficient water for complete coverage. Do not apply more than 4 times per season nor within 7
Crowder peas)	Leat miners Stink bugs	1 10 1 76	days of harvest. Do not use vines for feed or forage nor pasture treated areas.
Celery REI 43 nours	Aphids Leaf miners Leafhoppers Spittlebug Tarnished plant bug	13.	Apply specified dosage in 100 gallons of water as a full coverage spray" using not more than 200 gallons of finished spray per acre. Do not apply within 14 days of harvest. Do not exceed more than 3 applications per season.
Cucumbers	Spotted cucumber beetle Striped cucumber beetle Western-striped cucumber beetle	11/10	Apply specified dosage per acre 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 the label. A total of 3 applications may be made per crop season regardless of rate, formulation or method of application used Allow at least 7 days between applications and at least 1 day between last application and harvest.
<u> </u>	Leaf miners	11/10 11/16	Apply specified dosage per acre in sufficient
Eggplant	European com borer Flea beetles BEST AVAILABLE CO	1%	water to give complete coverage. For appli- cation by irrigation systems. Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of the label. A total of 3 applications may be made per crop season regardless of rate, formulation or method of application used Allow at least 7 days between applications, 4
REI 48 hours			Glinn at least 21 days both and lest

18 1 20

**This concentration is calculated for conventional hydraulic-type sprayers. When lower volumes of spray are applied per acre with concentrate sprayers, the concentration of Gowan Azinnhos-M 35 WP in the spray mixture must be increased in order to apply the amount of Gowan Azinnhos-M 35 WPper acre equivalent to a full coverage spray.

page 14 of 15 20

CROP	PEST	6	Pounds ruwen Rzinghas 35 WP	-M REMARKS	
VEGETABLES (cont'd) Onions (Green and Dry) RET 45 hours	Thrips		1%• to 2%	Apply specified dosage per acre by air or ground equipment in sufficient water for complete cov- erage. For application by irrigation systems Apply specified dosage per acre. Follow a directions given under the CHEMIGATION section of the label. A total of 3 application may be made per crop season regardless of rate, formulation or method of application used Allow at least 7 days between applications for dry butb onions. Allow at least 10 days be tween applications for green onions. For dry onions, allow at least 28 days between last application and harvest. For green onions, allow at least 7 days between tween last application and harvest.	
Peppers	Leaf miners		1% to 1%	Apply specified dosage per acre by air or ground equipment in sufficient water for complete coverage. For application by irrigation systems	
REI 48 hours	European corn borer Flea beetles		11/14	Apply specified dosage per acre. Follow a directions given under the CHEMIGATIOI section of the label. A total of 3 application may be made per crop season regardless of rate, formulation or method of application used Allow at least 7 days between applications an 7 days between last application and harvest	
· · · · ·	Colorado potato beetle		11/16	Apply specified dosage per acre in sufficient	
Potatoes	Banded cucumber beetle Lea! miners		1% 10 1%	water for complete coverage. For applic by irrigation systems: Apply specified do per acre. Follow all directions given under CHEMIGATION section of the label. A to	
	borer Spittle Flea beetle Tarnis	oppers ebugs shed nl bug	1% to 2%	3 applications may be made per crop seaso regardless of rate, formulation or method is application used. Allow at least 7 days between applications ar	
REI 48 hours	Tuberworm		1% 10 2%	7 days between last application and harves NOTE: Resistance of Colorado potato beet has occurred in some areas. Consult your li- cal Extension Service or Gow And sales re- resentative for details.	
Spinach KEI 48 hours	Aphids Leaf miners Mites		1 to 1¥	Apply specified dosage per acre in sufficie water for complete coverage. Do not app within 14 days of harvest. Do not exceed mo than 3 applications per season.	
	Colorado polato beetle		11/4	Apply specified dosage per acre by air or groun	
Tomatoes		n stink bug miners efly	1¥s to 1%s	equipment in sufficient water for complete co erage. For application by irrigation system Apply specified dosage per acre. Follow directions given under the CHEMIGATIC	
	Aphids* European com borer Flea beetles Grasshoppers Leathoppers Thrips		1 1/16 10 2 16	section of the label. A total of 4 application may be made per crop season regardless rate, formulation or method of application use The high rates should be used where heat infestations of late instar lepidopterous larv (large worms) and pinworms are present.	
	Tuberworm		1%+ 10 2%	 Allow at least 7 days between applications Rates of 2% pounds per acre or less may 	
		orm w-striped nyworm	2% 10 4%	applied up to day of harvest. Rates above 2% pounds require an interval 14 days between last application and harve NOTE: Resistance of Colorado potato bee has occurred in some areas. Consult your cal Extension Service or Gow AN sales in	

-

"In some areas, these species may have developed resistance to organophosphate insecticides. AL-plus - AL insecticide used alone may not provide satisfactory control in those areas. Consult your local agricultural advisor or cooperative extension service for recommendations



							page 15 of 15 .0
CROP		PE	ST	Gen	Pounds Anighes 5 WP	m	REMARKS
MELONS Honeyd e w	Leatho Leat m		· · · · · · · · · · · · · · · · · · ·	11	/w 10 11/w	wai	ply specified dosage per acre in sufficient ter to give complete coverage. For appli-
meions Muskmeion (cantaloupe) Watermeions Other meions	Rindw Spotle cuci	d	Striped cucumber beetle Vestern-striped cucumber beetle		17	dos unc sea me Alk at	ion by irrigation systems: Apply specified sage per acre. Follow all directions given der the CHEMIGATION section of the label, bial of 3 applications may be made per crop ason regardless of rate, formulation or thod of application used. bw at least 5 days between applications and least 7 days between last application and rvest.
RET 48 hours	5	Coneworm Seedworm BEST	AVAILABLE COP	7	Seu Romark		Use 3.25 pounds per 100 gallons of water (0.2% microin) as a full coverage spray". Use 1.6 pounds per 10 gallons of water (1% dilution) for low volume sprayers. Apply first application within 30 days following conelet closure fol- lowed by 3 to 5 applications (at least 30 days apart). Apply approximately 5 to 10 gallons of the 0.2% dilution with high volume sprayers or approximately 1 to 2 gallons of the 1% dilution with low volume sprayers per tree. Thorough coverage of cones is necessary for maximum control Apply no more than 6 applications per season
Ornamentais Nursery Plants		Aphids Cerucoccus scale Euonymus scale Juniper scale Lace bugs Leathoppers	Mites Olive scale Oysterchell scale <i>PuWharla</i> scale Thrips		1 to 13	è	Apply specified dosage per 100 gallons of water (1% twaspoonfuls per gallon). Spray all foliage surfaces including the underside of leaves for complete covarage. For control of black pineleaf brown soft, European elm, and Putnam scalus, use the higher rate. Repeat as necessary.
		Brown soft scale Putnam scale			2%		
REI 48 hours		European eim sci Biack pine leaf sc			2:+102	<u>'</u> 4	

"In some areas, these species may have developed resistance to organophosphale insecticides. GUTHION insecticide used alone may

• •

not provide setisfactory control in those areas. Consult your local agricultural advisor or cooperative extension service for recommendations.

"This concentration is calculated for conventional, hydraulic-type sprayers. When lower volumes of spray are applied per acre with concentrale sprayers, increase the concentration of GUTHION 35% Wettable Fowder in the spray multure in order to apply amount of GUTHION 35% Wettable Powder per acre equivalent to a full coverage. spray, in Southern Pine Seed Orchards where concilions dictate an air application, apply dosage per acre equivalent to a full coverage ground. spray in not less than one gallori of water per acre.

CROP	PEST	Pounds GUTHION 35% WP	REMARKS
Ornamentala (cont'd) Ornamentals Nursery Plants	Cune :- idg= Cone moth	5.5 to 11 -	Apply specified dosage per 100 gallons of water Time applications to concide with more flight when cores are open for pollination. Thorough coverage of cores is necessary for maximum control. Report as necessary.
	European plne shoot moth Nantucket pine tip moth	11025	Apply specified dosage per acre in sufficient water for good coverage. Time applications to coincide with moth flights.
REI 49 hours	Injury to hawthorn or American linden may our off material has been washed into soil and	occur under some conclu 5 treated area is dry	Ions. Do not allow children or pats on treaters area
Christmas Trees REI 46 hours	Scale spp Sawiy spp. European pine shoot moth Eastern pine shoot borei Nantucket priviliju moth	1 to 2,5	Apply specified dosage per acre by eir n- ground equipment in sufficient water to give complete coverage but not less than 1 galkon per acre. Time applications to coincide with susceptible pest development 4-11-90

On not allow children or picts in treated area until material is dry