

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Lee Tharrington
Micro Flo Company
P.O. Box 5948
Lakeland, Florida 33807

JAN 5 1999

Subject: Azinphosmethyl 50W

EPA Registration No. 51036-164 Amendment dated December 2, 1998

Addition of worker risk mitigation to label.

Dear Mr. Tharrington:

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 bearing the amended labeling:

- 1. On the first page of the label immediately above the "ACTIVE INGREDIENT" statement add the statement "This product must be sold, distributed, and used in a dry-coupling mixing/loading closed system".
- 2. At the top of the first page of the label this statement in a box must be added: "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."
- 3. On the final printed label the skull and crossbones symbol must be added in the immediate proximity to the signal word "DANGER" on the front of the label.
- 4. On page two of the label under the headings "Applicators and other handlers...wear" and "Mixers and loaders must wear" the statements "Chemical resistent headgear for overhead exposure" and Chemical resistent headgear" must be reinstated and should <u>not</u> be crossed out as was in the submitted label.
- 5. On page 4 under the heading "AGRICULTURAL USE REQUIREMENTS" the PPE statement must state that the coveralls should be worn over "long-sleeved shirt and long pants". The third statement must state " Chemical-resistant footwear plus socks, and protective eyewear".

- 6. On page 8 under "POSTING INSTRUCTIONS" delete the words "or retail greenhouses" since it must be stated on the label that all greenhouse uses are to be deleted.
- 7. On page 10 of the label under "FIELD CROPS" under the heading "ALFALFA, CLOVER, BIRDSFOOT TREFOIL" the PHI's should immediately follow the crop as they do on page 16 for "BROCCOLI (15),... etc" so that the heading reads "ALFALFA (14), CLOVER (16), BIRDSFOOT TREFOIL (21)". Under the heading "COTTON" the PHI should not be "(0/1/17)" and must not be shorter than the REI, as the defacto PHI must be at least as long as the REI. In this case it must be more than the one day that was on previously accepted labels, and at a minimum must be 2 days since all REI's must be at least 48 hours as specified in the table on page 4 of this label.
- 8. On page 17 under the crop "CUCUMBERS" and on page 19 for "TOMATOES" the PHI must be changed to be at least 2 days for the same reason as for 5 above.
- 9. The REI's must be listed for each crop under the headings "FIELD CROPS", "FRUIT", "NUTS", and "VEGETABLES",. The REI's must also be included under the headings "ORNAMENTALS", "SLASH PINE", and "CHRISTMAS TREES". In the submitted label the REI's were all crossed out but the <u>correct</u> REI's must be included with each crop.

Submit two copies of your final printed labeling before you release the product for shipment. A copy of the labeling stamped "Accepted With Comments" is enclosed for your records. If you have any questions concerning this letter, please contact me at (703) 308-9397.

Sincerely, Herge Tomplans

George Tompkins, Ph.D., Entomologist Insecticide-Rodenticide Branch Registration Division (7505C)

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RUP -= 27

AZINPHOSMETHYL 50W AGRICULTURAL INSECTICIDE Organophosphate

Under the Federal Insecticide, Fungicide, and Redeniicide Act. ns amended, for the pesticide registered under EPA Res. No. 51036-164

For control of certain insect pests on field crops, fruit, vegetable crops, nuts and certain ornamental plantings.

ACTIVE INGREDIENT:

O,O-Dimethyl S-[(4-oxo-1,2,3-benzotriazin-3 (4H)-yl)]phosphorodithioate......50.00% INERT INGREDIENTS:.....50.00%

KEEP OUT OF REACH OF CHILDREN

POISON

Skull + (12-55 he was

DANGER

PELIGRO

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

STATEMENT OF PRACTICAL TREATMENT ORGANOPHOSPHATE

IN CASE OF POISONING, CALL A PHYSICIAN IMMEDIATELY. HAVE PATIENT LIE DOWN AND KEEP QUIET.

IF SWALLOWED: Administer milk or water freely and induce vomiting by giving one dose (1/2 oz. or 15 ml.) of syrup of ipecac. If vomiting does not occur within 10 to 15 minutes, administer second If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Professional medical assistance should be secured immediately. Do not induce vomiting, or give anything by mouth to a person who is unconscious or convulsing.

IF INHALED: Remove from contaminated area and have patient lie down and keep quiet.

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

IF IN EYES: Wash with plenty of water. If irritation persists, get medical attention.

This product is an organophosphorus ester that cholinesterase.

See elsewhere on label for additional precautionary statements

EPA Reg. No. 51036-164

EPA Est. No. 51036 GA · 1

Manufactured By MICRO FLO COMPANY P.O. BOX 5948 LAKELAND, FL. 33807

PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals

DANGER

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. Do not contaminate feed or foodstuffs. Keep out of reach of children and domestic animals. SYMPTOMS OF POISONING: A sense of "tightness" in the chest, sweating, contracted pupils, stomach pains, vomiting and diarrhea. 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. Compound 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 case of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in oxygen tent and treated symptomatically.

PERSONAL PROTECTIVE EQUIPMENT

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

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

Applicators and other handlers (other than air-blast) must wear:

- 1. Coveralls over long-sleeved short sleeved shirt and long-legged short pants
- 2. Waterproof gloves
- 3. Chemical-resistant footwear plus socks
- 4. Chemical resistant headgear for overhead exposure
- 5. Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any R, P or HE filter

Mixers and loaders must wear:

- 1. Coveralls over long-sleeved short sleeved shirt and long-legged short pants
- 2. Waterproof gloves
- 3. Chemical-resistant footwear plus socks
- 4. Protective eyewear
- 5. Chemical resistant headgear
- 6. Chemical resistant apron when mixing or loading
- 7. For exposure in enclosed areas, use 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), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter For outdoor exposure, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any R, P or HE filter

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 and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls:

Human flagging is prohibited. Human flaggers must be in enclosed cabs. 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.

USER SAFETY RECOMMENDATIONS

Users should:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 3. 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.

ROTATIONAL CROP STATEMENT

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

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water 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. Protective information may be obtained from your Cooperative Agricultural Extension.

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 exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) listed in the chart below of 48 hours.

CROP			ACTIVITY		REI	<u>E</u>
Tree crops	(except	citrus)	Propping		14	days
_			Hand thinning		14	days
			Hand harvesting			days
i			Mowing	,	48	hours
			Irrigating	•	48	hours
:			Scouting		48	hours
			Other activities		48	hours
Citrus			Propping		30	days
			Hand thinning		30	days
			Hand harvesting		30	days
			Mowing		48	hours
			Irrigating		48	hours
			Scouting		48	hours
•			Other activities		48	hours
Grapes			Girdling		21	days
•			Cane throwing		21	days
			Leaf pulling			days
			Cane cutting			days
			Bunch thinning			days
			Hand harvesting			days
			Other activities			hours
All other	crops		All activities			hours
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Each 48 hour REI is increased to 72 hours in outdoor areas where average rainfall is less than 25 inches per 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:

- 1. Coveralls over short-sleeved shirt and short pants
- 2. Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or viton
- 3. Chemical-resistant footwear plus socks
- 4. Chemical-resistant headgear for overhead exposure

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. 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.

GENERAL INFORMATION

MIXING: Azinphosmethyl 50W mixes easily with water to form a suspension which is readily usable in all conventional ground spray equipment. Mix the required amount of Azinphosmethyl 50W with a small quantity of water. Add this premix through the screen while filling the spray tank or fill the tank to the required level and add the premix. Operate the agitator while mixing.

DOSAGE: Use specified dosage of Azinphosmethyl 50W in the amount of water necessary to give complete coverage of the foliage. The type of equipment used will determine the concentration required.

SPRAYING: Backpack spraying is prohibited. Work to windward; protect sprayer operators from drift or mist. 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 information in your area.

SEED CROPS: Applications at the rates shown may be made at any time to all crops listed on this label provided they are being grown for seed purposes only and are not to be used for food, feed or forage. For specific recommendations regarding timing of applications, consult your State Agricultural Experiment Station or Extension Service.

USE OF THIS PRODUCT IN GREENHOUSES OR ENCLOSED AREAS IS PROHIBITED.

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.

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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

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

Trees and Vines: Apply specified rate in a minimum of 10 gals. 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.

GENERAL CHEMIGATION INSTRUCTIONS

Azinphosmethyl 50W 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, Azinphosmethyl 50W may not be applied to that crop through irrigation systems. Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, side (wheel) roll, overhead solid set, or low pressure sprinkler irrigation system(s). Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. 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. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

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- A. Center Pivot, Motorized Lateral Move, and Side (Wheel) Roll Irrigation Equipment: Operate system and injection equipment at normal pressures recommended by the manufacturer of injection equipment used. Fill tank or injection equipment with water. Operate system for one complete circle for center pivot or one complete run for the other recommended equipment, measuring time required, amount of water injected, and acreage contained in circle or run. Mix recommended amount of product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run, but continue to operate irrigation system until the product has been cleared from last sprinkler head. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur.
- B. Overhead Solid Set and Low Pressure Sprinkler Irrigation Equipment: Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of product for acreage to be covered into quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. Provide constant mechanical agitation in the mix tank to insure that the product will remain in suspension during the injection cycle. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until pesticide is cleared from last sprinkler head.

SAFETY DEVICES

(1) The systems designated above 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. (2) All pesticide injection pipelines must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. (3) 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. (4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. (5) 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. (6) 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. (7) Do not apply when wind speed favors drift beyond the area intended for treatment.

SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water systems 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.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be 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. 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.

For additional instructions on safety precautions refer to statements (2), (3), (4), (6), and (7) in the section on SAFETY DEVICES.

POSTING INSTRUCTIONS

Posting of areas to be chemigated is required when any part of a treated area is within 300 feet of sensitive 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 when 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 signs shall be printed in English. Signs must be posted prior to application and must remain in place indefinitely as long as they are composed of material to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts

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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.

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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.
- 6. 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.
- 7. 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.
- 8. Do not apply within 150 feet by air or 100 feet by ground of an unprotected person(s) or occupied dwelling.
- 9. All aerial and ground application equipment must be properly 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.

RECOMMENDATIONS FOR USE

Rates are expressed in pounds Azinphosmethyl 50W per acre.

FIELD CROPS

NOTE: Preharvest Interval days indicated in () after each use

ALFALFA, CLOVER, BIRDSFOOT TREFOIL (East of the Mississippi River Only): (14/16/21)

-Leafhoppers, mites - 1/2 to 1 lb.

-Alfalfa weevil, Egyptian alfalfa weevil - 3/4 to 1 1/2 lbs.

-Alfalfa plant bug, Fleahopper, Grasshoppers, Lygus bugs, Spittle bug - 1 to 1 1/2 lbs.

Apply specified dosage per acre using a minimum of 10 gallons of water per acre with ground equipment and at least 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 control of alfalfa weevil or Egyptian alfalfa weevil with ground equipment. For application by irrigation systems, apply the specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. Do not apply rates between 3/4 and 1 pound per acre within 16 days of harvest. Do not apply rates above 1 pound per acre within 21 days of harvest. Do not apply more than once per cutting at any rate.

The REI is 48 hours.

BARLEY, OATS, RYE, WHEAT: (30)

-Cereal leaf beetle - 3/4 to 1 lb.

Apply specified dosage per acre in sufficient water for complete coverage. Do not apply more than once per season.

The REI is 48 hours.

COTTON: (0/1/17)

-Bollweevil - 1/4 to 1/2 lb.

-Pink bollworm - 1 to 2 lbs.

-Brown cotton leafworm, cotton fleahopper, cotton leafworm, thrips 1/2 lb.

-Rapid plant bug, tarnished plant bug - 1/2 to 1 lb.

Apply by ground or air equipment in sufficient water for complete coverage, but not less than 5 gals. of water per acre. For early season control of pink bollworm, use 1 to 1 1/2 lbs., and for midto late-season applications, use 1 1/2 to 2 lbs. No more than a total of 4 applications or 6 lbs. per acre per crop season may be used regardless of rate, formulation or method of application used. Repeat as necessary. Applications may be made up to 1 day before hand picking for rates up to 1 lb. per acre or within 17 days of picking at rates above 1 lb. per acre. Cotton may be machine harvested any time after application. Cotton receiving late-season applications should not be pastured.

The REI is 48 hours.

SOYBEANS: (45)

-Aphids, Bean leaf beetle, Green cloverworm, Leafhoppers, Leaf

miners, Leaf Rollers, Stink bugs, Velvet bean caterpillar - 3/4 to 1 lb.

-Mexican bean beetle - 1 to 1 1/2 lbs.

Apply specified dosage per acre in sufficient water to give complete coverage. Repeat as necessary. Do not graze or feed treated vines to livestock.

The REI is 48 hours.

TOBACCO: (6)

-Aphids, Grasshoppers, Tobacco hornworm, Tobacco Flea beetle - 1 to 1 1/2 lbs.

-Tobacco budworm - 1 1/2 lbs.

Apply specified dosage per acre in sufficient water for complete coverage. Treat for hornworms as soon as egg masses or worms are first found. Repeat as necessary. Prime before treating. The REI is 48 hours.

FRUIT

NOTE: Preharvest Interval days indicated in () after each use.

APPLES, CRAB APPLES, PEARS, QUINCES: (14) (7)

-Aphids, Apple maggot, Codling moth, European apple sawfly, Eye-spotted bud moth, Forbes scale, Fruit tree leaf roller, Green fruitworm, Leafhoppers, Mealybug, Mites, Orange tortrix, Oriental fruit moth, Pear midge, Pear psylla, Plum curculio, Putnam scale, Red-banded leaf roller, San Jose scale, Stink, bug, Tarnished plant bug - 1 1/2 to 3 lbs.

Apply specified dosage per acre by air or ground equipment in sufficient water for good coverage. Repeat as necessary. Up to 12 lbs. of Azinphosmethyl 50W may be applied per growing season. Allow at least 7 days between applications. Repeat applications made at less than a 14 day interval are considered early entry activities. Appropriate applicator and early entry PPE must be worn. Azinphosmethyl 50W is compatible with dormant and summer oils which may be added to apple and pear sprays in accordance with local recommendations. Do not use oils within 30 days of sulfur or lime-sulfur treatments. The REI is 48 hours.

CHERRIES: (15)

-Cherry leaf miner, Eye-spotted bud moth, Forbes scale, Fruit flies, Fruit tree leaf roller, Lesser peach tree borer, Mineola moth, Mites, Plum curculio, San Jose Scale - 1 1/2 lbs. Apply specified dosage per acre as a full coverage spray. Up to 6 lbs. of Azinphosmethyl 50W may be applied per crop season. Allow at least 14 days between applications. The REI is 48 hours.

APRICOTS, NECTARINES, PEACHES: (21)

(Eastern U.S.)

thinks ...

-Aphids, Cottony peach scale, European fruit lecanium scale, Forbes scale, Lesser peach tree borer, Mites, Oriental Fruit Moth, Peach

tree borer, Peach twig borer, Platynota flavendana leaf roller, Plum curculio, Red-banded leaf roller, San Jose scale, Stink bug, Tarnished plant bug, Terrapin scale, Thrips, Walnut scale, White peach scale - 1 3/4 to 2 1/4 lbs.

Apply specified dosage per acre as a full coverage spray. Allow at least 14 days between applications. A total of 6 3/4 lbs. per acre per crop season may be applied to nectarines. A total of 9 lbs. per acre per crop season may be applied to peaches and apricots. For control of peach tree borer, apply 2 to 3 sprays to trunk from ground to scaffold limbs, timed with moth flight. For control of scale, apply when crawlers are present. Azinphosmethyl 50W is compatible with dormant and summer oils which may be added to peach sprays in accordance with local recommendations.

The REI is 48 hours.

APRICOTS, NECTARINES, PEACHES: (21)

(West of the Rocky Mountains)

-Lesser peach tree borer, Oriental Fruit Moth, Peach twig borer, Peach tree borer, Platynota flavendana leaf roller, Plum curculio, Red-banded leaf roller, Stink bug, Tarnished plant bug, Thrips - 3 to 4 lbs.

Apply specified dosage per acre as a full coverage spray. Allow at least 14 days between applications. A total of 6 3/4 lbs. per acre per crop season may be applied to nectarines. A total of 9 lbs. per acre per crop season may be applied to peaches and apricots. For control of peach tree borer, apply 2 to 3, sprays to trunk from ground to scaffold limbs, timed with moth flight. For control of scale, apply when crawlers are present. Azinphosmethyl 50W is compatible with dormant and summer oils which may be added to peach sprays in accordance with local recommendations.

NOTE: It is suggested that when treating nectarines during bloom period, beekeepers should be warned well in advance to remove hives a safe distance from orchards to be treated.

The REI is 48 hours.

PLUMS, PRUNES: (15)

(Eastern U.S.)

-Aphids, Codling moth, Eye-spotted bud moth, Forbes scale, Fruit tree leaf roller, Lesser peach tree borer, Mites, Orange tortrix, Peach tree borer, Peach twig borer, Plum curculio, Red-banded leaf roller, San Jose scale, Stink bug, Tarnished plant bug, Tussock moth - 1 3/4 to 2 1/2 lbs.

-American plum borer - 3 lbs.

Apply specified dosage per acre as a full coverage spray. A total of 6 3/4 lbs. per acre per crop season may be applied to plums and prunes. Allow at least 10 days between applications. Repeat applications made at less than a 14 day interval are considered early entry activities. Appropriate applicator and early entry PPE must be worn. For control of peach tree borer, apply 2 to 3 sprays to trunk from ground to scaffold limbs, timed with moth flight. The REI is 48 hours.

PLUMS, PRUNES: (15)

(West of Rocky Mountains)

-Codling Moth, Eye-spotted bud moth, Fruit tree leaf roller, Lesser peach tree borer, Orange tortrix, Peach tree borer, Peach twig borer, Plum curculio, Red-banded leaf roller, Stink bug, Tarnished plant bug, Tussock moth - 2 to 4 lbs.

-American plum borer - 3 to 4 lbs.

Apply specified dosage per acre as a full coverage spray. A total of 6 3/4 lbs. per acre per crop season may be applied to plums and prunes. Allow at least 10 days between applications. Repeat applications made at less than a 14 day interval are considered early entry activities. Appropriate applicator and early entry PPE must be worn. For control of peach tree borer, apply 2 to 3 sprays to trunk from ground to scaffold limbs, timed with moth flight. The REI is 48 hours.

BLACKBERRIES, BOYSENBERRIES, LOGANBERRIES, RASPBERRIES: (3)

- -Leaf hoppers, Leaf rollers 1/2 lb.
- -Leaf miners 5/8 to 1 3/4 lbs.
- -Aphids 5/8 to 2 1/2 lbs.
- -Obscure root weevil 1 to 2 1/2 lbs.
- -Raspberry crown (root) borer 2 to 4 lbs.

Apply specified dosage per acre to foliage using sufficient water for good coverage. For root weevil and borer control prior to harvest, apply dosage to lower portion of canes and to the soil beneath the plants using sufficient water to cover. Limit applications to 3 per crop season. Allow 7 days between applications.

The REI is 48 hours.

BLUEBERRIES (EASTERN AND NORTH CENTRAL STATES ONLY): (7)

-Blueberry maggot, Fruitworms, Lecanium scale, Plum curculio - 1 to 1 1/2 lbs.

Apply specified dosage per acre with aerial or ground equipment using sufficient water for good coverage. Limit applications to 3 per crop season regardless of rate used and allow at least 10 days between applications.

The REI is 48 hours.

CRANBERRIES: (21)

- -Cranberry fruitworm, Sparganothis sulfureana, Tipworm 1 to 2 lbs.
- -Fireworms 2 lbs.

Apply specified dosage per acre by air using sufficient water for good coverage. For application by irrigation systems: Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. Limit applications to 3 per crop season regardless of rate used and allow at least 14 days between applications.

The REI is 48 hours.

CITRUS FRUITS: (30)

-Aphids, Black scale, Brown soft scale, Citricola scale, Chaff scale, Citrus mealybug, Citrus rootweevil complex, Citrus rust mite, Citrus thrips, Cottony-cushion scale, European brown snail, Florida red scale, Fruit tree leaf rollers, Fuller rose beetle, Glover scale, Orange tortrix, Purple scale, Snow scale, Western tussock moth, Whiteflies - 2 1/2 to 6 lbs.

-California red scale, Texas citrus mite, Yellow scale - 4 to 6 lbs.

Apply specified dosage per acre in sufficient water to provide full coverage. Limit applications to 2 per crop season regardless of rate used. Repeat applications made at less than a 30 day interval are considered early entry activities. Appropriate applicator and early entry PPE must be worn. If a second application is made, allow at least 28 days before harvest.

The REI is 7 days.

GRAPES: (21) (0)

-Grape berry moth, Grape cane girdlers, Grape leaf skeletonizer, Grape mealybug, Fleabeetles, Leaf hoppers, Mites, Red-banded leaf rollers, Thrips - 1/2 to 2 lbs.

Apply specified dosage per acre as a full coverage spray. Limit applications to 3 per crop season regardless of rate used. Allow 14 days between applications. Repeat applications made at less than a 21 day interval are considered early entry activities. Appropriate applicator and early entry PPE must be worn. If higher rate is used on last application, preharvest interval is 10 days. The REI is 48 hours.

STRAWBERRIES: (5)

-Aphids, Meadow spittlebug, Oblique-banded leaf roller, Obscure root weevil, Omniverous leaf tier, Pea leaf weevil, Small black (grass) weevil, Strawberry clipper, Strawberry leaf rollers, Whitefly - 1 lb.

Apply specified dosage per acre using sufficient water for good coverage. For application by irrigation systems: Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. Limit applications to 4 per crop season regardless of rate used. Allow 5 days between applications.

The REI is 48 hours.

NUTS

NOTE: Preharvest Interval days indicated in () after each use.

ALMONDS: (28)

Maria Land

-Peach twig borer, Navel orangeworm - 3 to 4 lbs.

Apply specified dosage per acre by concentrate sprayer or as a full coverage spray using not more than 400 gallons of finished spray per acre. Use a minimum of 20 gallons of water per acre when applying aerially. Limit application to one dormant spray and/or two post bloom sprays per season. Allow 120 days between the dormant and the first post-bloom spray. Allow at least 28 days

between the first and second post-bloom sprays. The second post-bloom spray may be applied as a split application as described below. Allow at least 28 days between the first post-bloom spray and the first spray of the split application.

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 not already sprayed with the first application.

Do not apply more than a total of 4 lbs. of finished product (2 lbs. a.i.) per acre when using one of 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 splitting applications, be sure to apply both of the recommended treatments in the selected spray schedule.

Do not graze livestock for 21 days after treatment. The REI is 48 hours.

FILBERTS (Pacific Northwest Only): (30)

-Apple mealybug, Filbert aphid, Filbert leaf roller, Filbertworm - 3 to 4 lbs.

Apply specified dosage per acre as a full coverage spray. Limit applications to 3 per crop season regardless of rate used. Allow 14 days between applications. Do not graze livestock in treated groves for 21 days after treatment.

The REI is 48 hours.

PECANS: (45)

-Aphids, Fall webworm, Hickory shuckworm, Leaf miners, May beetles, Mites, Pecan casebearer, Southern green stink bug, Spittle bugs, Twig girdlers, Walnut caterpillars - 3 to 4 lbs.

Apply specified dosage per acre as a full coverage spray. Limit applications to 3 per season regardless of rate used. Allow 7 days between applications. Repeat applications made at less than a 14 day interval are considered early entry activities. Appropriate applicator and early entry PPE must be worn. Do not apply after husks split. Livestock may be grazed in treated groves after a 21-day post-treatment interval.

The REI is 48 hours.

PISTACHIOS (California Only): (21)

-Navel Orangeworm - 5 lbs. as a full coverage spray, using not more than 500 gals. of finished spray per acre. Make one application from bud break to 10% hullsplit. Do not graze livestock in treated orchards for 21 days after treatment.

The REI is 48 hours.

WALNUTS: (21)

-Aphids, Codling moth, European red mite, Filbertworm, Navel orangeworm, Peach twig borer, Walnut huskfly, Red-humped caterpillar - 2 to 4 lbs. Apply specified dosage per acre 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. Do not exceed a total of 12 lbs. of finished product (6 lbs. a.i.) per acre per crop season. Allow 14 days between the first and the split applications. Do not apply after husk split. Livestock may be grazed in treated groves after a 21 day post-treatment interval. The REI is 48 hours.

VEGETABLES

NOTE: Preharvest Interval days indicated in () after each use.

ARTICHOKES: (30)

-Plume moth - 3 lbs. 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 this label. Limit applications to 3 per crop season regardless of rate. Allow at least 14 days between applications. Do not feed or ensile treated forage.

BEANS, DRY (30):

The REI-is 48-hours.

BEANS, SNAP (7):

-Leaf rollers, Mites - 1/2 to 1 lb.

-Aphids, Bean leaf beetle, Green cloverworm, Leafhoppers, Leaf miners, Stink bugs, Velvet bean caterpillars - 3/4 to 1 lb.

-Mexican bean beetle, Spotted cucumber beetle, Striped cucumber beetle, Tarnished plant bug, Western striped cucumber beetle - 1 lb. Apply specified dosage per acre in sufficient water for complete coverage. Repeat as necessary. Do not exceed 4 applications on dry beans. Do not feed or ensile treated forage.

The REI is 48 hours.

BROCCOLI (15), BRUSSELS SPROUTS (7), CABBAGE (INCLUDES TIGHT HEADING VARIETIES OF CHINESE CABBAGE) (21), CAULIFLOWER (15):

-Aphids, Cabbage looper, Diamondback moth, Imported cabbageworm - 1 to 1 1/2 lbs. Apply specified dosage per acre in sufficient water for complete coverage. Repeat as necessary.

-Cabbage maggot - 1/4 to 3/8 lb. Mix specified dosage in 50 gallons of water. Apply 4 to 6 ounces of this emulsion per plant at or immediately after transplanting.

-Cabbage maggot (Direct seeded fields in California only) - 1 1/2 lbs. 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 to 3 additional sprays are necessary during the growing season, depending on time of year and maggot population.

-Cabbage maggot (Transplant fields in California only) - 1 1/2 lbs. 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.

The REI is 48 hours.

CELERY: (14)

-Aphids, Leaf miners, Leafhoppers, Spittlebug, Tarnished plant bug - 1 lb.

Apply specified dosage in 100 gallons of water as a full coverage spray*, using not more than 200 gallons of finished spray per acre. Repeat as necessary.

*This dosage is calculated for conventional hydraulic-type sprayers. When lower wolumes of spray are applied per acre with concentrate sprayers, increase the concentration of Azinphosmethyl 50W per acre equivalent to a full-coverage spray.

The REI is 48 hours.

BLACKEYED PEAS (SOUTHERN PEAS, CROWDER PEAS): (7)

-Corn earworm, Cowpea curculio - 1 1/2 to 2 lbs.

-Leaf miners, Stink bugs - 3/4 to 1 lb.

Apply specified dosage per acre in sufficient water for complete coverage. Limit applications to 4 per crop season. Do not use vines for feed or forage, nor pasture treated areas.

The REI ig 48 hours.

CUCUMBERS: (1)

-Spotted cucumber beetle, Striped cucumber beetle, Western striped cucumber beetle - 1 lb.

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 this label. Limit applications to 3 per crop season regardless of rate used. Allow 7 days between applications.

The REI is 48 hours.

EGGPLANT: (21)

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-Leaf miners - 3/4 to 1 lb.

-European corn borer, Flea beetles - 1 lb.

Apply specified dosage per acre in sufficient water to give complete coverage. For application by irrigation systems: Apply specified dosage per acre. Follow all directions given under the

CHEMIGATION section of this label. Limit applications to 3 per crop season regardless of rate used. Allow 7 days between applications.

The-REI is 48 hours.

MELONS (HONEYDEW MELONS, MUSKMELONS, CANTALOUPE, WATERMELONS, OTHER

-Leafhoppers, Leaf miners - 3/4 to 1 lb.

-Ringworms, Spotted cucumber beetle, Striped cucumber beetle, Western-striped cucumber beetle - 1 lb.

Apply specified dosage per acre in sufficient water to give complete coverage. For application by irrigation systems: Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. Limit applications to 3 per crop season regardless of rate. Allow 5 days between applications. The REI is 48 hours.

ONIONS, GREEN (7)

ONIONS, DRY (28):

-Thrips - 1 to 1 1/2 lbs.

Apply specified dosage per acre in sufficient water to give complete coverage. For application by irrigation systems: Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. Limit applications to 3 per crop season. Allow 7 days between applications for dry onions and 10 days between applications for green onions. The REI is 48 hours.

PEPPERS: (7)

-Leaf miners - 3/4 to 1 lb.

-European corn borer, Flea beetles - 1 lb.

Apply specified dosage per acre in sufficient water to give complete coverage. For application by irrigation systems: Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label. Limit applications to 3 per crop season regardless of rate. Allow 7 days between applications. The REI is 48 hours.

POTATOES: (7)

-Colorado potato beetle - 3/4 lb.

- -Banded cucumber beetle, Leaf miners 3/4 to 1 lb.
- -European corn borer, Flea beetle, Leafhoppers, Spittlebugs, Tarnished plant bug - 1 to 1 1/2 lbs.

-Tuberworm - 1 1/8 to 1 1/2 lbs.

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 this label. Limit applications to 3 per crop season regardless of rate. Allow 7 days between applications.

The REI is 48 hours.

SPINACH: (14)

-Aphids, Leaf miners, Mites - 3/4 to 1 lb. Apply specified dosage per acre in sufficient water for complete coverage. Limit applications to 3 per crop season regardless of rate.

The REI is 48 hours.

TOMATOES: (0)

-Colorado potato beetle - 3/4 lb.

-Banded cucumber beetle, Drosophila, Green stink bug, Leaf miners, Whitefly - 3/4 to 1 lb.

-Aphids, European corn borer, Flea beetles, Grasshoppers, Leafhoppers, Thrips - 1 to 1 1/2 lbs.

-Tuberworm - 1 1/8 to 1 1/2 lbs.

-Corn earworm, Fruitworm, Pinworm, Yellow-striped armyworm, Hornworm - 1 1/2 to 3 lbs.

Apply specified dosage per acre by air or ground equipment 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. Limit applications to 4 per crop season regardless of rate used. The high rates should be used where heavy infestations of late-instar lepidopterous larvae (large worms) and pinworms are present. Allow 7 days between applications.

NOTE: Rates above 1 1/2 lbs. per acre require an interval of 14 days between application and harvest.

The REI is 48 hours.

ORNAMENTALS

ORNAMENTALS, NURSERY PLANTS, FOREST AND SHADE TREES:

-Aphids, Cerococcus scale, Euonymus scale, Juniper scale, Lace bugs, Leafhoppers, Mites, Olive scale, Oystershell scale, Pulvinaria scale, Thrips, 3/4 to 1 lb.

-Brown soft scale, Putnam scale - 2 lbs.

-Black pine leaf scale, European elm scale - 1 1/2 to 2 lbs.

Apply specified dosage per 100 gallons of water (2 level teaspoonfuls per gallon). Spray all foliage surfaces including the underside of leaves for complete coverage. For control of black pine leaf, brown soft, European elm, and Putnam scales, Use 4 level teaspoonfuls per gallon. Repeat as necessary.

-Cone midge, Cone moth - 4 to 8 lbs.

Apply specified dosage per 100 gallons of water. Time applications to coincide with moth flight when cones are open for pollination. Thorough coverage of cones is necessary for maximum control. Repeat as necessary.

-European pine shoot moth, Nantucket pine tip moth - 3/4 to 1 1/2 lbs.

Apply specified dosage per acre in sufficient water for good coverage. Time applications to coincide with moth flights. For application to individual trees use 1 level tablespoonful of

00 902

Azinphosmethyl 50W per gallon of water. The REI is 48 hours.

SLASH PINE:

-Coneworm, Seedworm - 3 to 4 lbs. Apply specified dosage per 100 gallons of water. Thorough coverage of cones is necessary for maximum control. Repeat as necessary.

The REI is 48 hours.

CHRISTMAS TREES:

ASSUMED BY THE BUYER.

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Scale spp., Sawfly spp., European pine shoot moth, Eastern pine shoot borer, Nantucket pine tip moth - 3/4 to 1 1/2 lbs. Apply specified dosage per acre by air or ground equipment in sufficient water to give complete coverage but not less than 1 gallon per acre. Time applications to coincide with susceptible pest development.

The REI is 48 hours.

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