

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..

Guthion® Solupak

**50% WETTABLE POWDER CROP INSECTICIDE
IN WATER SOLUBLE PACKETS**

For effective economical insect control.

ACTIVE INGREDIENT:

O,O-Dimethyl S-[(4-oxo-1,2,3-benzotriazin-3(4H)-yl)methyl]phosphorodithioate 50%

INERT INGREDIENTS:..... 50%

100%

EPA Reg. No. 264-733

EPA Est. No. 3125-MO-1

DEALERS SHOULD SELL IN ORIGINAL PACKETS ONLY

Keep water soluble packets in this container and store in a cool dry place, but not below freezing (32F). Protect from heat. Keep away from open flame. Do not heat. Entire inner packets dissolve in water. After opening outer bag, drop the required unopened inner packets into spray tank as directed. Do not excessively handle water soluble packet or expose it to moisture, since this may cause breakage



**STOP - Read the label before use.
KEEP OUT OF REACH OF CHILDREN**



DANGER POISON

PELIGRO

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

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577
For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

ACCEPTED

AUG 21 2003

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

264-733

FIRST AID

Contains an organophosphate that inhibits cholinesterase	
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
<p>In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor.</p>	
<p>Note To Physician: ANTIDOTE - Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine.</p> <p>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 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.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Fatal if swallowed. May be fatal if inhaled. Harmful if absorbed through skin. Causes moderate eye irritation. Do not breathe dust or spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)

Mixers and loaders must wear:

- Long-sleeved shirt and long pants or coveralls worn over long-sleeved shirt and short (or long) pants.
- Chemical-resistant gloves (see "Material Note" below)
- Shoes plus socks
- Protective eyewear
- Chemical-resistant apron

Applicators:

Aerial applicators and ground applicators in fully enclosed cabs must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Use of fully enclosed cabs can result in reduced exposure to pesticides.

Ground applicators not in fully enclosed cabs, persons (other than flaggers) supporting aerial application within 300 feet of the application site, and handlers engaged in those activities for which use of an engineering control is not possible, such as cleaning up a spill or leak and cleaning or repairing contaminated equipment must wear:

- Coveralls over long-sleeved shirt and long pants.
For airblast applicators, coveralls must be chemical resistant
- Chemical-resistant apron if exposed to the concentrate
- Chemical-resistant gloves (see "Material Note")
- Chemical-resistant footwear plus socks

- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- A respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter. Do not use type N prefilter if oil is added to the spray tank for application.

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

Material Note: Chemical resistant glove materials are those made from materials such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyethylene, PVC or Viton. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Engineering controls statements:

- Water-soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard for agricultural pesticides [40 CFR 170.240(d)(4-6)] (WPS). Mixers and loaders must:
 - wear the PPE required above for mixers/loaders, and
 - be provided and must have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown: the PPE specified in the PPE section of this labeling for handlers engaged in those activities for which use of an engineering control is not possible.
- Pilots must use an enclosed cockpit that meets the requirements listed in the WPS.
- Use of fully enclosed cabs can result in reduced exposure to pesticides.
- Human flagging is prohibited.
- When handlers use enclosed cabs 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

User should:

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

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and wildlife. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. 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 weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Protective information may be obtained from your Cooperative Agricultural Extension Service.

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

Physical and Chemical Hazards

Keep away from open flame. Do not heat.

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 (WPS), 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 WPS.

Do not enter or allow entry into treated areas during the restricted entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop.

Azinphos-methyl is a double notification chemical. Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

Under specified conditions, the WPS allows workers to enter pesticide treated areas during a REI to perform certain agricultural tasks. Under WPS, the following exceptions to the REI may apply to double notification chemicals:

- no contact early entry (40CFR170.112(b))
- short term tasks with no hand labor (40CFR170.112(c))
- tasks during an agricultural emergency (40CFR170.112(d)).

For complete information on requirements for these early entry exceptions, please refer to "The Worker Protection Standard for Agricultural Pesticides - - How to Comply: What Employers Need to Know," dated July 1993 (EPA735-B-93-001), and to the EPA website at <http://www.epa.gov/pesticides/safety/workers/workers.htm>.

In addition, certified crop advisors and persons performing crop advising tasks under a qualified crop advisor's direct supervision are exempt from certain specified provisions of the WPS. For complete information on crop advisor exemptions under WPS, refer to 40CFR170.104.

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
- Chemical-resistant gloves (made out of any waterproof material)
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Do not store below freezing (32F). Protect from heat. Keep away from open flame. Do not heat. Exposure to moisture or excessive handling of water soluble packets may cause breakage. Store packets in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577 or contact Chemtrec at 800-424-9300.

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: Do not use container in connection with food, feed, or drinking water. Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

This product may not be reformulated or used under State Special Local Need Registrations for use on sugarcane, ornamentals, Christmas trees, shade trees, or forest trees, except as specified on this label.

MIXING: The enclosed packets containing GUTHION SOLUPAK insecticide are water-soluble. Do not allow packet to become wet prior to adding to the spray tank. Do not handle with wet hands. After opening outer bag, drop the required unopened inner packets into spray tank as directed. Entire inner packets dissolve in water. Reseal outer bag to protect remaining packets.

To prepare the spray mixture, drop the required number of unopened packets, as determined under "Recommended Application", into the spray tank while filling with water to the desired level. Operate the agitator while mixing. Depending on the water temperature and

the degree of agitation, the packets should be completely dissolved within approximately 5 minutes from the time they were added to the water.

COMPATIBILITY: GUTHION SOLUPAK is physically compatible with many registered pesticides and liquid fertilizers. Do not use PVA packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic, which is not soluble in water or solvents. When considering mixing GUTHION SOLUPAK with other pesticides or with liquid fertilizer, first contact your supplier. For further information, contact your local Bayer CropScience representative. If your supplier and Bayer CropScience representative have no experience with the combination you are considering, you should conduct tests to determine physical compatibility.

To determine physical compatibility, pour the recommended proportions of each chemical with the same proportion of water as will be present in the chemical supply tank into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is considered physically compatible. When mixing wettable powder or dry flowable formulations, add and disperse these first, then add liquid pesticides. Conduct another compatibility test at concentrations, which will be present in the irrigation lines. If there is any separation, which cannot be remixed readily, Bayer CropScience recommends that the combination not be used.

Combination should be kept agitated and should be applied immediately. Do not allow combination to sit for prolonged periods in the chemical supply tank or irrigation lines.

DOSAGE: Use specified dosage of GUTHION SOLUPAK in the amount of water necessary to give complete coverage of foliage. Determine the total amount of wettable powder to be added to the spray tank based on the rates under "Recommended Application". For each one pound of wettable powder to be added to the spray tank use one 1 pound packet. For example, if it is determined that 2 pounds of GUTHION SOLUPAK should be added to the spray tank, add two 1-pound packets. The type of equipment used will determine the concentration required; however, use of these packets is not recommended for making highly concentrated mixtures such as used in aircraft spraying.

SPRAYING: Backpack or hand wand spraying is prohibited. 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.

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

CLOSED COCKPITS ARE REQUIRED FOR ALL AERIAL APPLICATIONS.

AERIAL APPLICATION IS ONLY ALLOWED ON CRANBERRIES, COTTON, BLUEBERRIES, POTATOES, AND SOUTHERN PINE SEED ORCHARDS.

DO NOT APPLY TO THE POINT OF RUNOFF.

HUMAN FLAGGING IS PROHIBITED.

CHEMIGATION

GUTHION SOLUPAK may be applied through recommended types of irrigation systems to many crops. The REMARKS section for each crop lists the types of applications allowed. If application through irrigation systems is not listed in the REMARKS section for a crop, GUTHION SOLUPAK may not be applied to that crop through irrigation systems.

Type of Irrigation Systems: Apply GUTHION SOLUPAK only through sprinkler, including center pivot, lateral move, side roll, overhead solid set, or low pressure sprinkler irrigation systems. For control of foliage-feeding pests, use GUTHION only in systems, which provide uniform wetting of the foliage. Do not apply GUTHION SOLUPAK through any other type of irrigation system or systems, which wet only the soil.

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 residues in the crop can result from non-uniform distribution of treated water.

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

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.

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

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

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point 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: DO NOT APPLY GUTHION SOLUPAK THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly services an average of at least 25 individuals daily at least 60 days out of the year.

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

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

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

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

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is 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: This sign is in addition to any sign posted to comply with the Worker Protection Standard. Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses 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 2-1/2 inches tall, and all letters and the symbol shall be a color, which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

Posting required for chemigation does not replace other posting and reentry interval requirements for farm worker safety.

Compatibility: When mixing with other chemicals refer to Compatibility section elsewhere on this label.

Agitation: For application of GUTHION SOLUPAK alone, a chemical supply tank is necessary for pre-mixing. For application of GUTHION SOLUPAK 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: When a chemical supply tank is used, you must determine the required amounts of GUTHION SOLUPAK to mix in the tank.

The amount of GUTHION SOLUPAK needed equals the number of pounds of GUTHION SOLUPAK to be applied per acre multiplied by the number of acres to be chemigated.

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

For example, if you want to apply 2 pounds of GUTHION SOLUPAK per acre to 130 acres in 20 hours and your injection pump delivers 15 gallons per hour, you need: 2 pounds GUTHION SOLUPAK per acre X 130 acres = 260 pounds of GUTHION SOLUPAK. 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.

SPRINKLER IRRIGATION SYSTEMS

All directions and requirements under the GENERAL DIRECTIONS AND REQUIREMENTS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS section of this label must be followed for sprinkler irrigation systems.

In addition, the following directions apply to sprinkler irrigation systems:

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

Center-Pivot and Automatic-Move Linear Systems: Inject the specified dosage per acre continuously for one complete revolution or move of the system. DO NOT USE END GUNS. For a foliar application, the system should be run at maximum speed. For a soil application, the system should be run at a slower speed with application in at least 1/4 inch of water.

Solid Set and Manually Controlled Linear Systems: For foliar application, injection should be during the last 30 to 60 minutes of regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation. For soil treatment, application should be in at least 1/4 inch of water. DO NOT USE END GUNS.

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.

1. Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. For groundboom and aerial applications, use medium or coarser spray nozzles according to ASAE 572 definition for standard nozzles or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles.
2. Make aerial or ground applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is less than 10 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
3. Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
4. Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.
5. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
6. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.
7. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.
8. For ground-boom, chemigation, orchard or other airblast applications, do not apply within 25 feet of permanent water bodies (rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries, or commercial fish ponds).
9. For aerial application to potatoes, do not apply within 150 feet of permanent water bodies (aquatic buffer zone).
10. For aerial application to crops other than potatoes, do not apply within 50 feet of permanent water bodies (aquatic buffer zone).
11. For aerial applications, release spray at the lowest height consistent with efficacy and flight safety. If the application includes an aquatic buffer zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.
12. 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 wingspan or 90% of rotor blade diameter. Use upwind swath displacement.

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.

RECOMMENDED APPLICATIONS - FIELD CROPS			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
Cotton (for use in TX & MO only)	For use on boll weevil only.	1/2 to 1	Apply specified dosage per acre by air or ground equipment. Application by chemigation is prohibited. Maximum of 3 applications per crop season is allowed. Allow at least 5 days between applications and 7 days between last application and harvest. Do not graze treated fields. Mechanical harvesting is required. GUTHION SOLUPAK may be tank-mixed in one application with DEF 6 defoliant. Refer to DEF 6 label for recommended rates, precautions, and restrictions. Restricted-entry interval (REI) - 7 days.

RECOMMENDED APPLICATIONS - FRUIT			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
FRUIT NOTE: It is suggested that when treating fruit during the bloom period, bee keepers should be warned well in advance to remove hives a safe distance from orchards to be treated.			
Apples Crab apples Pears	Aphids* Apple maggot Codling moth European apple sawfly Eye-spotted bud moth Forbes scale Fruittree leaf roller Green fruitworm* Leafhoppers* Mealybug* Orange tortrix Pear midge Plum curculio Putnam scale Red-banded leaf roller San Jose scale* Stink bug Tarnished plant bug*	2 to 3 [1/2 to 3/4 lb per 100 gallons] [assuming 400 gal/A]	Apply specified dosage per acre by ground equipment in sufficient water for good coverage. Up to 8 pounds GUTHION SOLUPAK may be applied per crop season for apples and/or crab apples, up to 6 pounds may be applied per crop season for pears. Pears are limited to a maximum of 3 applications and a total of 6 lbs. GUTHION SOLUPAK/A per year. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Application by aircraft, chemigation or use during dormant season is prohibited. Allow at least 7 days between applications and 14 days between last application and harvest. If last application is greater than 2 pounds per acre (1/2 pound per 100 gallons), allow 21 days between last application and harvest. Applications made at rates above 2 pounds per acre can only be made in conjunction with an Integrated Pest Management (IPM) program. Restricted-entry interval (REI) – 14 days. In addition to early entry exceptions allowed by the Worker Protection Standard, you may enter or allow workers to enter treated areas to perform fireblight pruning 7 days following application as long as you and any workers wear coveralls over long-sleeved shirt and long pants, chemical-resistant gloves made out of any waterproof material, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure, and protective eyewear. The user shall not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 30 days after application. Do not graze livestock in treated orchards. GUTHION SOLUPAK is compatible with oils which may be added to apple and pear sprays in accordance with local recommendations.
Cherries	Eye-spotted bud moth Forbes scale Fruit flies Fruittree leaf roller Lesser peach tree borer Plum curculio San Jose scale* Cherry leaf miner Mineola moth	1-1/2 [1/2 pound per 100 gallons] [assuming 300 gal/A]	Apply specified dosage per acre by ground equipment as a full coverage spray. Up to 3 pounds of GUTHION SOLUPAK may be applied per acre per crop season. Limit to 2 applications of 1.5 lbs GUTHION SOLUPAK/A per year. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Application by aircraft or use during dormant season is prohibited. Allow at least 14 days between applications and 15 days between last application and harvest. Do not graze livestock in treated orchards. California: Apply after fruit harvest but before leaf fall. Restricted-entry interval (REI) – 15 days. The user shall not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 30 days after application.

RECOMMENDED APPLICATIONS - FRUIT			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
FRUIT NOTE: It is suggested that when treating fruit during the bloom period, bee keepers should be warned well in advance to remove hives a safe distance from orchards to be treated.			
Nectarines Peaches	Aphids [§] Cottony peach scale [§] European fruit lecanium scale [§] Forbes scale [§] Lesser peach tree borer Oriental fruit moth Peach twig borer Peach tree borer Platynota flavidana leaf roller Plum curculio Redbanded leaf roller San Jose scale* [§] Stink bug Thrips Tarnished plant bug Terrapin scale [§] Walnut scale [§] White peach scale [§]	1-3/4 to 2-1/4 [1/2 to 5/8 lb per 100 gallons] [assuming 350 gal/A]	Apply specified dosage per acre by ground as a full coverage spray. Allow at least 14 days between applications. A total of 4 1/2 pounds per acre per crop season may be applied to nectarines, or peaches. Limit to 2 applications of 2 1/4 lbs GUTHION SOLUPAK/A per year. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Allow at least 21 days between last application and harvest. For control of peach tree borer, apply up to 2 sprays to trunk from ground to scaffold limbs, timed with moth flight. For control of scale, apply when crawlers are present. § - indicates control in Eastern US only. GUTHION SOLUPAK is compatible with oils which may be added to peach sprays in accordance with local recommendations. Do not graze livestock in treated orchards. Application by chemigation, aircraft or use during dormant season is prohibited. Restricted-entry interval (REI) – 14 days. The user shall not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 30 days after application.
Blackberries Boysenberries Loganberries Raspberries	For use on raspberry crown borer only	5/8 to 1	Apply specified dosage per acre to lower portion of canes and soil only. Do not apply more than twice per season, nor within 7 days of harvest. Minimum of 10 days between applications. Restricted-entry interval (REI) – 7 days. The user shall not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 30 days after application.
Blueberries, highbush & rabbiteye (for use in AL, AR, FL, GA, IN, MI, NJ, NY, & NC only)	Blueberry maggot Fruitworms Lecanium scale Plum curculio	1 to 1-1/2	Apply specified dosage per acre with aerial or ground equipment using sufficient water for good coverage. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. A total of 2 applications may be made per crop season. Allow at least 10 days between applications and at least 7 days between last application and harvest. Restricted-entry interval (REI) – 7 days. The user shall not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 30 days after application.

RECOMMENDED APPLICATIONS - FRUIT			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
FRUIT NOTE: It is suggested that when treating fruit during the bloom period, bee keepers should be warned well in advance to remove hives a safe distance from orchards to be treated.			
Blueberries, lowbush (for use in ME only)	Blueberry maggot	1 to 1-1/2	Apply specified dosage per acre with aerial or ground equipment using sufficient water for good coverage. A total of 2 applications may be made per crop season. Allow at least 10 days between applications and at least 10 days between last application and harvest. Restricted-entry interval (REI) – 10 days. The user shall not authorize any person who is not covered by the Worker Protection Standard (WPS), such as members of the general public involved in "pick-your-own," "U-pick," or similar operations, to enter a treated area for 30 days after application.
	Fruitworms Lecanium scale Plum curculio		
Cranberries	Cranberry fruitworm	1 to 2	Apply specified dosage per acre. If by air use sufficient water for good coverage. For application by irrigation systems: Follow all directions given under the CHEMIGATION section of this label. A total of 2 applications may be made per crop season. Allow at least 14 days between applications and at least 21 days between last application and harvest. Restricted-entry interval (REI) – 7 days.
	Sparganothis sulfureana Tipworm Fireworms		

RECOMMENDED APPLICATIONS - NUTS			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
Almonds	Peach twig borer Navel orangeworm	3 to 4	Apply specified dosage per acre by ground only. Use at least 400 gallons per acre. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Only one application is allowed per season. Allow at least 30 days between application and harvest. Aerial application or use during dormant season is prohibited. Do not graze livestock in treated orchards. Restricted-entry interval (REI) – 30 days.
Pistachios (use in CA & AZ only)	Navel orangeworm	4	Apply specified dosage per acre by ground equipment as a full coverage spray using not more than 400 gallons of finished spray per acre. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Aerial application or use during dormant season is prohibited. Only one application per season is allowed. Allow at least 21 days between application and harvest. Do not graze livestock in treated orchards. Restricted-entry interval (REI) – 21 days.
Walnuts	Codling moth Filbertworm Navel orangeworm Walnut husk fly Red-humped caterpillar	3 to 4	Apply specified dosage per acre by ground equipment as a full coverage spray using not more than 400 gallons of finished spray per acre. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Aerial application or use during dormant season is prohibited. Only one application per season is allowed. Allow at least 30 days between application and harvest. Do not graze livestock in treated orchards. Restricted-entry interval (REI) – 30 days.

RECOMMENDED APPLICATIONS - VEGETABLES			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
Brussels sprouts	For use on cabbage maggot only.	1-1/2	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. Only one application per crop season is allowed. Allow at least 7 days between application and harvest. Restricted-entry interval (REI) – 7 days.
Parsley, Root and Moss-curled (use in NJ & OH only)	For use on carrot root weevil [<i>Listronotus oregonensis</i> (Leconte)] only.	1	Apply in sufficient water to achieve uniform coverage. Do not apply to the point of runoff. Aerial application is prohibited. Do not apply through any type of irrigation system. Do not apply within 30 days of harvest. A maximum of 2 applications of GUTHION SOLUPAK are allowed per year with a minimum of 30 days between applications. Restricted-entry interval (REI) – 30 days.
Potatoes (use in Columbia River basin of OR and WA only)	Colorado Potato beetle	3/4	Apply specified dosage per acre. If by air, use sufficient water for complete coverage. For aerial applications, do not apply within 150 feet of rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries, and commercial fish ponds. For application by irrigation systems: Follow all directions given under the CHEMIGATION section of this label. A total of 2 applications may be made per crop season regardless of rate or method of application used. Allow at least 7 days between applications and 7 days between last application and harvest. Restricted-entry interval (REI) – 7 days. NOTE: Resistance of Colorado potato beetle has occurred in some areas. Consult your local Extension Service or Bayer CropScience Sales Representative for details.
	Banded cucumber beetle	3/4 to 1	
	Leaf miners		
	European corn borer	1 to 1-1/2	
	Flea beetle		
	Leafhoppers		
Spittlebugs			
Tarnished plant bug			
Tuberworm		1-1/8 to 1-1/2	

RECOMMENDED APPLICATIONS - NURSERY STOCK & SOUTHERN PINE SEED ORCHARDS			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
Nursery Stock (use on woody shrubs, vines, seedling trees, and non-bearing fruit trees in outdoor commercial nursery settings only)	For use on black Vine weevil only.	2	A maximum of 4 applications of GUTHION SOLUPAK may be made to plants in association with meeting state nursery stock inspection and certification requirements only. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Allow at least 10 days between applications and 30 days between last application and sale of treated plants. Application by aircraft, in greenhouses or by hand-held equipment is prohibited. Not for use on Christmas trees. Injury to hawthorn or American linden may occur under some conditions. Restricted-entry interval (REI) – 4 days.

RECOMMENDED APPLICATIONS - SOUTHERN PINE SEED ORCHARDS			
CROP	INSECT	LB GUTHION SOLUPAK/A	REMARKS
Southern Pine Seed Orchards	Coneworm Seed worm	3	Apply by aerial application only; apply specified dosage in not less than one gallon of water per acre. A maximum of 2 applications per year can be made. Do not apply until hand pollination has been completed. Allow at least 30 days between applications. Thorough coverage of cones is necessary for maximum control. Restricted-entry interval (REI) - 45 days.

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

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.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

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NET CONTENTS: CONTAINS 5 ONE-POUND WATER SOLUBLE PACKETS

LABELING FOR ONE POUND PACKET

**Guthion Solupak
50% Wettable Powder Crop Insecticide**

Contains Azinphosmethyl, 50%

EPA Reg. No. 264-733

Keep out of reach of children.

(See Outer Package for Complete Use and Handling Directions and Precautions including Antidote Statement)

Net Weight: One Pound

SPECIAL LABELING REQUIRED FOR BAGS CONTAINING WATER SOLUBLE PACKETS



Bayer CropScience

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Guthion Solupak (PENDING) Submitted 10/10/02, Resubmitted 2/12/03, Resubmitted 8/1/03, Resubmitted 8/11/03