



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

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JAN 15 1999

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Mr. Joseph L. Powell  
Project Manager  
Valent U.S.A. Corporation  
1333 N California Blvd. Suite 600  
Walnut Creek, CA 94596-8025

Dear Mr. Powell:

Subject: Addition of Closed Systems Labeling  
Monitor 4 Spray  
EPA Reg. No. 59639-56  
Labeling Submitted November 6, 1998

The labeling amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, As Amended (FIFRA), is acceptable, provided that you:

Submit one copy of your final printed label incorporating the following corrections before you release the product for shipment.

1. Add the word, "used" to the closed system statement so that it reads as stated below. This change is the result of recent communication received from our Special Review and Reregistration Division and is needed to maintain consistency with the current closed system labeling language requirements.

This product must be sold, distributed, and used in a dry-coupling mixing/loading system.

2. It is understood that the word, "POISON" appears on the finished label in red on a contrasting background.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended label constitutes acceptance of this condition.



ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

JAN 15 1999

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
59639-56

**RESTRICTED USE PESTICIDE  
DUE TO ACUTE DERMAL TOXICITY  
AND RESIDUE EFFECTS ON AVIAN SPECIES**  
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.

# MONITOR<sup>®</sup> 4 Spray (INSECTICIDE)

Active Ingredient	By Wt.
*Methamidophos.....	40.0%
Inert Ingredients.....	60.0%
*O,S-dimethyl phosphoramidothioate	
Contains 4 pounds active per gallon at 68°F.	

THIS PRODUCT MUST BE SOLD/DISTRIBUTED IN A DRY-COUPLING MIXING/LOADING SYSTEM.

[ Red Skull & Crossbones Symbol ]

**DANGER - POISON**

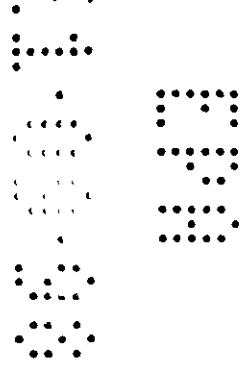
**KEEP OUT OF REACH OF CHILDREN.**

**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 the label, find someone to explain it to you in detail).

SEE STATEMENT OF PRACTICAL TREATMENT ON SIDE PANEL.

**NET CONTENTS 2.5 GALLONS**



**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS & DOMESTIC ANIMALS**  
**DANGER**

Fatal if swallowed, inhaled or absorbed through skin! Do not breathe vapor or spray mist. Rapidly absorbed through skin! Do not get in eyes, on skin, or on clothing.

**STATEMENT OF PRACTICAL TREATMENT:** Methamidophos is an organophosphate, cholinesterase inhibitor.

**ANTIDOTE:** If swallowed: Drink 1 or 2 glasses of water or milk and induce vomiting by touching back of throat with finger. If possible contact a physician, Poison Control Center, or emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Take person and product container to the nearest emergency treatment center.

**If Inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration and get medical attention immediately.

**If on Skin:** Wash skin thoroughly with soap and water. Get medical attention immediately.

**If in Eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention immediately.

**Note to Physicians:** Emergency Information - call 1-800-892-0099. Methamidophos is a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (Protopam) is also antidotal and may be used in conjunction with atropine, but should not be used alone.

**PERSONAL PROTECTIVE EQUIPMENT(PPE):**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:** coveralls over short-sleeved shirt and short pants, chemical-resistant gloves, such as barrier laminate or butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure, chemical-resistant apron when cleaning equipment, mixing, or loading, and a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approved number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approved number prefix TC-14G).

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

**USER SAFETY RECOMMENDATIONS:**

Users should:

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

**ENVIRONMENTAL HAZARDS**

This product is extremely toxic to birds and other wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

This product is highly toxic to bees exposed to direct treatment or residues on blooming 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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 statements on this label about personal protective equipment(PPE), notification to workers, 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) of 48 hours.

Each 48-hour REI is increased to 72 hours in outdoor areas where average annual rainfall is less than 25 inches a year.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls over short-sleeved shirt and short pants, chemical-resistant gloves, such as, barrier laminate or butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils, chemical-resistant footwear plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

**DISCLAIMER, CONDITIONS OF SALE,  
LIMITED WARRANTY  
AND LIMITATION OF LIABILITY**

**IMPORTANT:** Read the entire Label including this Disclaimer, Limited Warranty and Limitation of Liability before using this product. If the terms are not acceptable, return the unopened product within 15 days of purchase.

**RISKS OF USING THIS PRODUCT**

It is impossible to eliminate all risks associated with the use of this product. Such risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, moisture conditions, irrigation practices, presence of other materials, cultural practices or the manner of use or application, all of which are factors beyond the control of Valent. **All such risks shall be assumed by the Buyer.**

Valent shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on the label. User assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

**LIMITED WARRANTY**

Valent warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product described above.

**DISCLAIMER OF ALL OTHER WARRANTIES**

**VALENT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

**LIMITATION OF LIABILITY**

In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THIS PRODUCT.**

**NO AMENDMENTS**

Valent and Seller offer this product, and Buyer and User accept it, subject to the foregoing Disclaimer, Conditions of Sale, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

**PROMPT NOTICE OF CLAIM**

Valent must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from date of application) so that an immediate inspection of the affected property and growing crops can be made. Unless Buyer and Users shall promptly notify Valent of any claims, they shall be barred from obtaining any remedy.

**TANK MIXES**

**NOTICE:** Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

**DIRECTIONS**

May be applied to potatoes by sprinkler irrigation system. Do not apply by chemigation to any other crop, or this crop using any other type of irrigation system.

**USE DESIGNATED AMOUNT OF PRODUCT IN THE FOLLOWING GALLONS OF WATER PER ACRE UNLESS OTHERWISE NOTED:**

**GROUND APPLICATION** - 25 to 125 gals. water.

**AIR APPLICATION** - 3 to 10 gals. water.

Crops	Insects	Amount of MONITOR 4 Spray per Acre	Further Use Directions	Days to Harvest
Cotton	Aphids (Early Season) Thrips (Early Season)	1/5 to 2/5 pts. (0.1 to 0.2 lbs. active) per acre	Apply specified dosage (0.1 to 1.0 lb. active per acre) as needed. For Whiteflies, Fleahoppers, and when low rates are used for Aphids, a second application may be needed for heavy infestations.	50 (and before bolls open)
	Fleahoppers	2/5 pt. (0.2 lb. active) per acre		
	Whiteflies	0.5 to 1 pt. (0.25 to 0.5 lb. active) per acre		
	Aphids (Mid to late Season) Beet Armyworm Cabbage Looper Lygus Bugs (CA, AZ Only) Mites Thrips (Mid to Late Season)	1 to 2 pts. (0.5 to 1.0 lb. active) per acre	Do not feed gin trash to livestock or allow animals to graze on treated areas.	
Potatoes	Aphids Cabbage Looper Colorado Potato Beetle (except Long Island, NY) Cutworms (Foliage Feeding) European Corn Borer Flea Beetles Potato Tuberworm	1.5 to 2 pts. (0.75 to 1.0 lb. active) per acre	Apply in a 7 to 10 day preventive program or as necessary. Resistance to Colorado potato beetle has occurred in other areas. Consult your local extension service for details.	14
	Potato Leafhopper	1 to 2 pts. (0.5 to 1.0 lb. active) per acre		

## CHEMIGATION - POTATOES

### SPRINKLER IRRIGATION APPLICATION TO POTATOES:

This product may only be applied through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set, or hand move. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place. A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

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 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.

**Solid Set Systems:** Apply specified dosage for the entire length of the irrigation period or for a 30 to 60 minute period at the end of a regular irrigation set or as a 30 to 60 minute injection as a separate application not associated with a regular irrigation. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining pesticide, a dye indicator may be injected into the lines to mark the end of the application period. **See NOTE.**

**Center Pivot Systems:**

Inject the specified dosage per acre continuously for one complete revolution of the system. **See NOTE.**

**NOTE:** Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application.

Inject the product with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

Application of more than label recommended quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness.

## SPRAY DRIFT PRECAUTIONS

Observe the following precautions when spraying to avoid drift to off-target areas and unprotected persons:

- Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.
- Do not apply within 150 feet by air or 100 feet by ground of an unprotected person or occupied dwelling.
- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For aerial applications, the spray booms should be mounted on the aircraft so as to minimize drift caused by wingtip vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or rotor diameter.
- Use the largest droplet size consistent with acceptable pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.



- For aerial application, spray should be released at the lowest height consistent with acceptable pest control and flight safety. Application at more than 10 feet above the crop canopy should be avoided.
- Make aerial or ground applications when wind-velocity favors on-target deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when wind gusts approach 15 mph.
- Low humidity and high ground temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and / or high temperature.
- Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing height above ground. Mist or fog may indicate the presence of an inversion in humid areas. Applicators may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

## INTEGRATED PEST AND RESISTANCE MANAGEMENT

Local integrated pest management systems and resistance management strategies are available for controlling the pests on this label. Such systems include use of biological control agents, alternative chemicals and scouting. Consult your local Extension specialist or other agricultural advisor for further details.

## POSTING

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 ports 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 area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters 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.

## STORAGE AND DISPOSAL

### PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.

### STORAGE

Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Not for use or storage in or around the home. Do not store next to feed or food, or transport in or on vehicles containing foodstuffs or feeds. Store in a cool, dry place. Protect from heat. For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099.

### PESTICIDE DISPOSAL

This product is 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

Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or dispose of by other procedures allowed by State and local authorities.



[OR The Following Statement Will Be Used On returnable Containers:]

**CONTAINER REUSE**

**RETURNABLE CONTAINER:** This container is a dedicated, single-product returnable container. Refill this container only with pesticide. Return empty container to seller or to location designated by seller as a collection point. Do not break seals, add anything to container or open container after use. Do not rinse or contaminate empty container. Do not dispose of empty container or use it for any other purpose.

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Manufactured for  
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