

Reg # 59639-33

PM-14

File 128

United States Environmental Protection Agency
Washington, D.C. 20460

OCT 19 1993

Office of
Prevention, Pesticides and
Toxic Substances

Mark Herbst
VALENT U.S.A. CORP
1333 N. CALIFORNIA BLVD BOX 8025
WALNUT CREEK CA 94596

Subject: Label Amendment Submission of 06/21/93
in Compliance with WPS Labeling Requirements
EPA Reg No. 59639-33
ORTHENE 90 S

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

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

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)

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Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

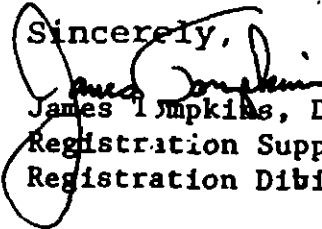
Hand or courier deliveries of final labels may be made to:

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

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,


James I. Hopkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

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Admin: 59639-33

Analyst comments:

Separate mixer/loader PPE not necessary.

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ORTHENE®

90 S

(INSECTICIDE)

Active Ingredient	By Wt.
*Acaphate (O,S-Dimethyl acetylphosphoromidothioate)	90%
Inert Ingredients	10%
*ORTHENE®, Acaphate U.S. Pat. No. 3,914,417	

KEEP OUT OF REACH OF CHILDREN
CAUTION
SEE SIDE PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS

Formulation for Eggs/DEADHATCH®

THIS PRODUCT MAY NOT BE REFORMULATED, REPACKAGED
OR RELABELED.

NET WEIGHT 20 POUNDS

Manufactured for
Valent U.S.A. Corporation © 1992
Walnut Creek CA 94596-8025
Made in U.S.A.
R Form 256-J
EPA Reg. No. 59639-33-AA

ACCEPTED
with COMMENTS
In EPA Letter Dated

OCT 19 1993

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

59639-33

59639-33

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash hands thoroughly after handling.

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

If swallowed: Drink 1 to 2 glasses of water (or milk) and induce vomiting by touching the back of the 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 in eyes: Wash eyes with fresh water for 15 minutes. If irritation continues, see a doctor.

If on skin: Wash skin with plenty of soap and water.

If inhaled: Remove person from exposure area.

Note to physicians: Emergency information - call 1-800-882-0088. Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibitor appear, atropine is antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.

Personal Protection Equipment (PPE):

Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and chemical-resistant headgear for overhead exposure.

Mixers and Loaders must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and chemical-resistant headgear.

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 pesticide is toxic to birds. Applications may adversely affect birds in rangeland treatment areas. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Cover or soil-incorporate spills.

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.

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 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) of 24 hours.

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, waterproof gloves, shoes plus socks and chemical-resistant headgear for overhead exposure.

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DIRECTIONS
Do not apply this product through any type of irrigation system.
COTTON

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CROPS	INSECTS	AMOUNT* ORTHENE 90 S PER ACRE	ACRES PER LB. ORTHENE 90 S	FURTHER USE INSTRUCTIONS**	DAYS TO HARVEST
Cotton	Thrips	3.2 oz.	1 lb. to 5 acres	Apply in water at 1 to 5 gals. (AZ 3 to 5 gals.) spray per acre by air. Gelsolage should be increased as plant size increases to insure thorough coverage. (In CA apply a minimum of 5 gals. per acre by air). Apply 10 to 25 gals. spray per acre by ground.	21
	Plant bugs (Lygus)	0.25 to 1 lb.	1 lb. to 4 acres up to 1 lb. to 1 acre	Apply when eggs or insects first appear. Repeat as necessary to maintain control.	
		CA, AZ ONLY 0.5 to 1 lb.	CA, AZ ONLY 1 lb. to 2 acres up to 1 lb. to 1 acre		
	Flies	0.25 lb.	1 lb. to 4 acres		
	Cotton Aphid	0.5 to 1 lb.	1 lb. to 2 acres up to 1 lb. to 1 acre	Apply in water at 3 to 10 gals. spray per acre by air (minimum 5 gals. per acre in CA, AZ) or 10 to 25 gals. spray per acre by ground. Apply when eggs or insects first appear. Repeat as necessary to maintain control.	
	Whitefly	1 lb.	1 lb. to 1 acre		
	Armyworms (including Beet Armyworms)	E. OF ROCKIES 0.5 to 1 lb.	E. OF ROCKIES 1 lb. to 2 acres up to 1 lb. to 1 acre	Apply in water at 3 to 10 gals. spray per acre by air (minimum 5 gals. per acre in CA, AZ) or 10 to 25 gals. spray per acre by ground.	
	Cabbage Looper	CA, AZ ONLY 1 lb.	CA, AZ ONLY 1 lb. to 1 acre		
	Tabacco Budworm			Tabacco Budworm - Budworm Larvae: Early season light infestation use 1 lb. to 2 acres. Mid and late season moderate to severe infestations use 1 lb. to 1 acre. Apply when eggs appear and repeat at a 3 to 7 day interval.	
	Larvae			Budworm - Budworm Adults: Moths are controlled when they come in direct contact with spray particles during application. Moth kill is most likely to occur when application is made late in the evenings during periods of peak activity.	
	Adults			Budworm - Budworm Eggs: When spray particles come in direct contact with eggs, hatching larvae may be controlled as they emerge and emerge from their egg cases. For DEADMATCH (contact insecticide activity) and larval control, apply ORTHENE 90 S in combination with insecticides (including synthetic pyrethroids in the following label section) registered for use on cotton at their recommended larvicidal label rates.	
Cotton	Eggs/ DEADMATCH®	0.25 to 0.5 lb.	1 lb. to 4 acres up to 1 lb. to 2 acres	Deadmatch - Apply when insects appear and repeat at a 3 to 7 day interval.	
	Pink Bollworm (CA, AZ)	1 lb.	1 lb. to 1 acre		
	Stinkbugs	0.8 lb.	1 lb. to 1.25 acres	Stinkbugs - Control measures are most effective when ground applications are made in the evenings and the spray is directed toward the lower portion and base of the plant. Apply in water at 10 to 25 gals. spray per acre by ground. Aerial applications are not as effective in controlling stinkbugs. However, should aerial application be necessary apply in water at 3 to 10 gals. spray per acre (minimum 5 gals. per acre in CA, AZ). Apply when insects first appear or damage is first noted and repeat as necessary to maintain control.	

* Where a rate range is given, use the higher rate where heavy insect pressure exists.
** Do not feed gin trash to livestock or allow animals to graze on treated areas.

COTTON TANK MIXES

Crops	Insects	AMOUNT ORTHENE 90 S + LORSBAND® 4E Per Acre	Further Use Instructions	Days to Harvest
Cotton (CA, AZ)	Armyworms, Budworm, Cabbage Looper, Cotton Aphid, Curculionids, Fleahoppers, Greenhoppers, Pink Bollworm, Plant Bugs (Lygus, Mirids), Salt Marsh Caterpillar, Thrips, Tobacco Budworm, Whitefly	4.44 oz. to 17.77 oz. + 1 to 2 pts.	Do not feed gin trash or treated forage to livestock. Do not allow livestock to graze on treated areas.	21

CROPS	INSECTS	AMOUNT ORTHENE 90 S (oz.) + **SYNTHETIC PYRETHROID (fl. oz.) PER ACRE	PYRETHROID MAXIMUM LBS. ACTIVE PER SEASON	FURTHER USE INSTRUCTIONS	DAYS TO HARVEST FOR EACH COMBINATION
Cotton	Budworm	ORTHENE 90 S 1 lb. to 2 acres up to 1 lb. to 1 acre		Begin applications when eggs or insects appear and apply as needed to maintain control.	21
	Tabacco	PYDRIN® 2.4 EC. 5.3 - 10.67	2.0	Apply in 3 to 5 gals. of water with aerial equipment or in 10 to 25 gals. of water with ground equipment.	21
	Budworm	ASANA® 1.9 EC. 1.4 - 3.4*	0.5		21
	Cabbage Looper	ASANA® XL 3.9 - 9.6*	0.5		21
	Plant bugs	CAPTUR® 2 EC. 1.3 - 6.4	0.5		21
	Thrips	BAYTHROID® 2 EC. 1.6 - 3.2	0.89	Do not feed gin trash to livestock or allow animals to graze on treated areas.	21
	Fleahoppers	KARATE® 1 E. 3.2 - 5.12	0.2		21
	Pink Bollworm (CA, AZ)	AMBUSH® 2 EC. 6.4 - 12.8	3.0		21
	Aphids	POUNCE® 3.2 EC. 7 - 8*	3.0	Stinkbugs and Curculionids.	21
	Whitefly	AMMO® 2.5 EC. 2 - 5*	1.0	Use ORTHENE at 1 lb. to 1.25 acres.	21
	Cotton Leaf	CYBUSH® 3 EC. 1.7 - 2.54*	1.0	All applicable d. restrictions, restrictions and precautions on the EPA registered labels are to be followed.	21
	Perforator	SCOUT® 0.3 EC. 6.4 - 8	0.19		28
	Fall Armyworm	SCOUT® X-TRA 2.13 - 3.33	0.19		28
	Curculionids				
	Stinkbugs				
	Sweet Potato Whitefly				

* Use low rate only for light insect infestations.
** Synthetic pyrethroids should be used within the guidelines of state and/or regional resistance management programs and recommendations.

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COTTON SEED HOPPER BOX TREATMENT
(EXCEPT AZ, CA AND THE BLACK LANDS OF TEXAS)

Crop	Insects	Amount ORTHENE 90 S Per Acre	Further Use Instructions
Cotton	Thrips Cotton Aphids Black (Greasy) Cutworm	2.5 to 3.25 oz.	Apply 2.5 to 3.25 oz. ORTHENE 90 S per acre in the planter box as a dry powder. Even coverage is required for acceptable insect control. To obtain even coverage, fill planter box 1/2 full of seed, add the proper amount of ORTHENE 90 S and mix thoroughly with a stick. Add the remainder of the seed to the planter box and the additional required amount of ORTHENE 90 S followed by thorough mixing. For improved mixing, premix seed with ORTHENE 90 S in a suitable container, then pour treated seed into planter box. Loss of ORTHENE 90 S will occur if air planters are used. Plants grown from improperly covered seed will not exhibit insect control. Do not use treated seed for food or feed purposes or process for oil.

COTTON IN-FURROW APPLICATION

CROP	INSECTS	AMOUNT ORTHENE 90 S PER ACRE	ACRES PER LB. ORTHENE 90 S	FURTHER USE INSTRUCTIONS																		
Cotton	Aphids Thrips Black (Greasy) Cutworm	0.56 to 1.1 lbs. (.5 to 1 lb. active)	1 lb. to 1.8 up to 1 lb. to .9 acres	Refer to the ORTHENE 90 S conversion chart before making product application. ORTHENE 90 S CONVERSION CHART <table><thead><tr><th>LB. ACTIVE</th><th>ORTHENE 90 S LBS.</th><th>ORTHENE 90 S OZ.</th></tr></thead><tbody><tr><td>0.5</td><td>0.56</td><td>9.0</td></tr><tr><td>0.6</td><td>0.67</td><td>10.7</td></tr><tr><td>0.75</td><td>0.83</td><td>13.3</td></tr><tr><td>0.9</td><td>1.0</td><td>16.0</td></tr><tr><td>1.0</td><td>1.1</td><td>17.6</td></tr></tbody></table> <p>Apply 0.56 to 1.1 lbs. ORTHENE 90 S in 3 to 5 gals. of water per acre as an in-furrow spray. NOTE: For the Blacklands of Texas use only the 1.1 lbs. ORTHENE 90 S rate (17.6 oz.). ORTHENE 90 S can be mixed with fungicides that are sprayed in-furrow for disease control. Flat-fan nozzles used for in-furrow application should be set so that the fanned spray pattern is aligned with the row to insure good spray deposition in the seed furrow. Cone type nozzles may not provide a spray pattern that insures maximum spray deposition in the seed furrow, and should be avoided. Spray systems that employ metal or plastic tubing for delivery of spray solution into the seed furrow should have tubing securely fastened to the furrow opener and should be checked frequently to insure that the tubing is properly positioned to deposit spray solution into the seed furrow.</p>	LB. ACTIVE	ORTHENE 90 S LBS.	ORTHENE 90 S OZ.	0.5	0.56	9.0	0.6	0.67	10.7	0.75	0.83	13.3	0.9	1.0	16.0	1.0	1.1	17.6
LB. ACTIVE	ORTHENE 90 S LBS.	ORTHENE 90 S OZ.																				
0.5	0.56	9.0																				
0.6	0.67	10.7																				
0.75	0.83	13.3																				
0.9	1.0	16.0																				
1.0	1.1	17.6																				

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.
NOTE: This product is sold by weight and package is full when packed, but due to fluffy nature this material is inclined to settle.

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.
Store in cool, dry place. Protect from excessive heat.
Do not contaminate food or foodstuffs.
Do not store or transport near food or feed.
For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-872-0099 or Chemtrec 1-800-424-9300.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Completely empty bag into application equipment. Do not reuse container.
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.

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IMPORTANT INFORMATION. READ BEFORE USING PRODUCT.

LIMITED WARRANTY: 1. Valent U.S.A. Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. Valent does not make nor authorizes any agent or representative to make, any other warranty, guarantee or representation, express or implied, concerning this product. Specifically, **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE.**

2. Critical and unforeseeable factors beyond Valent's control prevent it from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which product is applied, lack of complete control over the handling and application of this product, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit under average conditions for the uses stated on the labeling and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Valent under 1 above) resulting from handling, storage, and use of the product.

3. Precautions stated on the labeling should be followed to avoid hazardous exposure to the product.

AMBUSH® — Reg. TM of ICI Agricultural Products for permethrin insecticide.
AMMO® — Reg. TM of FMC Agri Chemical Group for cypermethrin insecticide.
ASANA® — Reg. TM of E. I. duPont de Nemours & Co., Inc. for esfenvalerate insecticide.
BAYTHROID® — Reg. TM of Mobay Corp. for cyfluthrin synthetic pyrethroid.
CAPTURE® — Reg. TM of FMC Agri Chemical Group for bifenthrin insecticide miticide.
CYMBUSH® — Reg. TM of ICI Agricultural Products for cypermethrin insecticide.
KARATE® — Reg. TM of ICI Agrochemicals Co. U.K. for lambda-cyhalothrin insecticide.
LORSBAN® — Reg. TM of Dow Chemical Company for chlorpyrifos insecticide.
ORTHENE® — Reg. TM of Chevron Chemical Company for acephate insecticide.
POUNCE® — Reg. TM of FMC Agri Chemical Group for permethrin insecticide.
PYDRIN® — Reg. TM of E. I. duPont de Nemours & Co., Inc. for fenvalerate insecticide.
SCOUT® — Reg. TM of Hoechst-Roussel Agri-Vet Co. for tralomethrin pyrethroid insecticide.

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