



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

51036-238

Date of Issuance:

APR 15 1996

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Acephate 90SP

Name and Address of Registrant (include ZIP Code):

Micro Flo Company
P.O. Box 5948
Lakeland, FL 33807

5503441 165/18

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c) (7) (A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c) (5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label changes before you release the product for shipment:

- a. Add the designation, "EPA Reg. No. 51036-238".
- b. Under "Environmental Hazards", delete the statement, "Applications may adversely effect birds in rangeland areas." The label submitted for the subject product does not bear use on rangeland.
- c. Under the container disposal directions, add the following statement.

"If burned, stay out of smoke."

Signature of Approving Official:

Date:

APR 15 1996

d. Clarify the term, "PHI" wherever it appears throughout the label to denote that it is in terms of the number of days to harvest.

e. Add the following use instruction to the tank mix directions and wherever references are made to the mixing of the product with other pesticides; i.e. "Acephate 90SP can be mixed with fungicides that are sprayed in-furrow for disease control." Refer to PR Notice 82-1, a copy of which was enclosed with our Notice of April 11, 1996 for your 51036-236 product.

"Acephate 75SP can be mixed with [fill in with identity of the registered products], provided those products do not prohibit tank mixes, provided the most restrictive of label limitations and precautions are observed, and provided no label dosage rates are exceeded."

3. Submit your revised Confidential Statement of Formula (CSF) showing the following corrections within 30 days of the date of this Notice.

a. correct the current designation, "alternate" to "basic".

b. correct the upper and lower certified limits for both the active ingredient and the inert ingredient. Your current CSF dated April 28, 1995 has these values reversed.

4. Should it be determined that additional product chemistry data/information are needed on the subject formulated product, submit such data/information within 6 months of our notification of such determination. The product chemistry data submitted in support of the subject formulated product is currently under evaluation.

5. Provide the outstanding generic data listed on the attachments A and B to this Notice within the established timeframes as noted on these attachments. These data have been identified as being pertinent to the use patterns appearing on the subject product labeling.

6. Submit two copies of the revised final printed label before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Robert A. Forrest
Product Manager (14)
Insecticide-Rodenticide Branch
Registration Division (7504C)

3/11

ACEPHATE 90SP
INSECTICIDE

Active Ingredient	
*Acephate (O,S-Dimethyl acetylphosphoramidothioate)	90%
Inert Ingredients	10%
Total	100%

THIS PRODUCT MAY NOT BE REFORMULATED, REPACKAGED OR RELABELED.

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

Acephate is an organophosphate, cholinesterase inhibitor.

IF SWALLOWED: Drink 1 or 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.

IN CASE OF EYE CONTACT: Wash eyes with fresh water for 15 minutes. If irritation continues, see a doctor.

FOR SKIN CONTACT: Wash skin with plenty of soap and water.

IF INHALED: Remove person from exposure area.

Note to Physicians: Emergency Information - call 1-800-892-0099. Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.

EPA Reg. No. 51036-~~app~~ *FGI*

EPA Est. No. 51036-GA-01

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

ACCEPTED
with COMMENTS
in EPA Letter Dated

APR 15 1996

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

51036-238

4211

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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

Long-sleeved shirt and long pants

Waterproof gloves

Shoes plus socks

Chemical-resistant headgear for overhead exposure.

Mixers and Loaders must wear:

Long-sleeved shirt and long pants

Waterproof gloves

Shoes plus socks

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 effect birds in rangeland treatment areas. 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.

5/11

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 feed or food. For help with any leak, fire or exposure involving this material, call 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.

CHEMIGATION

Do not apply this product through any type of irrigations system.

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

6/11

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
 Chemical-resistant headgear for overhead exposure.

COTTON

CROPS	INSECTS	AMOUNT* ACEPHATE 90SP PER ACRE	ACRES PER LB. ACEPHATE 90SP	FURTHER USE INSTRUCTIONS**	PHI
Cotton	Thrips	3.2 oz.	1 lb. to 5 acres	Apply in water at 1 to 3 gals. (AZ 3	21
	Plant bugs (Lygus)	0.25 to 1 lb.	1 lb. to 4 acres up to 1 lb. to 1 acre	to 5 gals.) spray per acre by air. Gallonage should be increased as plant size increases to insure thorough coverage. (In CA apply a	
		CA, AZ ONLY 0.5 to 1 lb.	CA, AZ ONLY 1 lb. to 2 acres up to 1 lb. to 1 acre.	minimum of 5 gals. per acre by air). Apply 10 to 25 gals. spray per acre by ground. Apply when eggs or insects first appear. Repeat as necessary to maintain control.	
	Flea- hopper	0.25 lb.	1 lb. to 4 acres	Lygus - Use higher rates for lygus adults that have migrated into cotton.	
	Cotton Aphid, Whitefly	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	
Army- worms (exclud- ing Beet Army- worm), Cabbage loopers	1 lb.	1 lb. to 1 acre	insects first appear. Repeat as necessary to maintain control.		

7/11

<p>Bollworm Tobacco Budworm, Larvae Adults</p>	<p>E. OF ROCKIES 0.5 TO 1 LB. CA, AZ ONLY 1 LB.</p>	<p>E. OF ROCKIES 1 lb. to 2 acres up to 1 lb. to 1 acre CA, AZ ONLY 1 lb. to 1 acre</p>	<p>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. Bollworm-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. Bollworm-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. Bollworm-Budworm Eggs: When spray particles come in direct contact with eggs hatching larvae may be controlled as they consume and emerge from their egg casing. For DEADHATCH (contact ovicidal activity) and larval control apply ACEPHATE 90SP in combination with insecticides (including synthetic pyrethroids in the following label section) registered for use on cotton at their recommended larvicidal label rates.</p>
<p>Eggs/ DEAD- HATCH</p>	<p>0.25 to 0.5 lb.</p>	<p>1 lb. to 4 acres up to 1 lb. to 2 acres</p>	<p>(continued from above)</p>
<p>Pink Bollworm (CA, AZ)</p>	<p>1 lb.</p>	<p>1 lb. to 1 acre</p>	<p>Pink Bollworm-Apply when insects appear repeat at a 5 to 7 day intervals.</p>
<p>Stinkbug Cutworms</p>	<p>0.8 lb.</p>	<p>1 lb. to 1.25 acres</p>	<p>Cutworms-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 cutworms. 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.</p>

*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

8/11

CROPS	INSECTS	AMOUNT ACEPHATE 90SP + Chlorpyrifos 4E PER ACRE	FURTHER USE INSTRUCTIONS	PHI
Cotton (CA, AZ)	Armyworms, Bollworms, Cabbage looper, Cotton Aphid, Cutworms, Flea- hopper, Grass-hoppers, 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

COTTON TANK MIXES

CROPS	INSECTS	AMOUNT ACEPHATE 90SP + **SYNTHETIC PYRETHROID (fl. oz) PER ACRE	PYRETHROID MAXIMUM LBS ACTIVE PER SEASON	FURTHER USE INSTRUCTIONS	PHI

9/11

Cotton	Bollworm, Tobacco Budworm, Cabbage Looper, Plant bugs, Thrips, Flea- hoppers, Pink Bollworm (CA, AZ), Aphids, Whitefly, Cotton Leaf Perfor- ator, Fall Armyworm, Cutworms, Stink Bugs, Sweet Potato Whitefly,	ACEPHATE 90SP 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
		PYDRIN 2.4 EC, 5.3-10.67	2.0		
		or			
		ASANA 1.9 EC, 1.4 - 3.4*	0.5	Apply in 3 to 5 gals. of water with aerial equipment or in 10 to 25 gals. of water with ground equipment.	21
		or			
		ASANA XL, 3.9 - 9.6	0.5		21
		or			
		CAPTURE 2EC, 1.3 - 6.4	0.5	Do not feed gin trash to livestock or allow animals to graze on treated areas.	21
		or			
		BAYTHROID 2EC, 1.6 - 3.2	0.89		21
		or		Stinkbugs and Cutworms: Use ACEPHATE 90SP at 1 lb. to 1.25 acres. All applicable directions, restrictions and precautions on the EPA registered labels are to be followed.	
		KARATE 1E, 3.2 - 5.12 (except CA)	0.2		21
		or			
	AMMO 2.5EC, 2 - 5	1.0		21	
	or				
	CYMBUSH 3EC 1.7 - 2.56	1.0		21	
	or				
	SCOUT 0.3EC 6.4 - 8 (except CA)	0.19		28	
	or				
	SCOUT X-TRA 2.13 - 3.33 (Except CA)	0.19		28	

*Use low rate only for light infestations

**Synthetic pyrethroids should be used within the guidelines of state and/or regional resistance management programs and recommendations.

10/11

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

CROP	INSECTS	AMOUNT ACEPHATE 90SP 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. ACEPHATE 90SP 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 ACEPHATE 90SP and mix thoroughly with a stick. Add the remainder of the seed to the planter box and the additional required amount of ACEPHATE 90SP followed by thorough mixing. For improved mixing, premix seed with ACEPHATE 90SP in a suitable container, then pour treated seed into planter box. Loss of ACEPHATE 90SP 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

CROPS	INSECTS	AMOUNT ACEPHATE 90SP PER ACRE	ACRES PER LB ACEPHATE 90SP	FURTHER USE INSTRUCTIONS
Cotton	Aphids Thrips Black (Greasy) Cutworm	0.56 to 1.1 lbs. (.5 to 1.1 lb active)	1 lb to 1.8 up to 1 lb to .9 acres	Refer to ACEPHATE 90SP conversion chart before making product application

ACEPHATE 90SP CONVERSION CHART

LB. ACTIVE	LBS. ACEPHATE 90SP	OZ. ACEPHATE 90SP
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

Apply 0.56 to 1.1 lbs. ACEPHATE 90SP 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. ACEPHATE 90SP rate (17.6).

ACEPHATE 90SP 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. 11/19

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.

MICRO FLO WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL THEREOF AND IS REASONABLY FIT FOR THE PURPOSE STATED ON SUCH LABEL ONLY WHEN USED IN ACCORDANCE WITH THE DIRECTIONS FOR USE. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT BECAUSE OF SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF MICRO FLO. IN NO CASE SHALL MICRO FLO BE LIABLE FOR THE CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER.

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