# 34704-862

06/19/2013



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

> OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Premjit Halarnkar, Ph.D., MPA Loveland Products PO Box 1286 Greeley, CO 80632

JUN 1 9 2013

Subject: Addition of succulent green bean use restrictions and accompanying language Acephate 90 WSP EPA Reg. No.: 34704-862 Submission date: March 8, 2013 Decision #: 476720

Dear Dr. Halarnkar:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit one copy of your final printed labeling before you release the product for shipment. If you have any questions regarding this label, please contact Dr. Jennifer Urbanski at 703-347-0156 or urbanski.jennifer@epa.gov.

Sincerely yours,

Venus Eagle Product Manager (01) Insecticide-Rodenticide Branch Registration Division (7505P)

Enclosure- Stamped Label



# ACEPHATE 90

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# wsp

#### INSECTICIDE IN A WATER SOLUBLE BAG

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ACTIVE INGREDIENT:	
Acephate ( <i>O</i> , S-Dimethyl acetylphosphoramidothioate)	90.0%
OTHER INGREDIENTS:	
	100.0%

# KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID
	Acephate is an organophosphate, cholinesterase inhibitor
If swallowed:	Call a poison control center or doctor immediately for treatment advice.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
	Do not give anything by mouth to an unconscious person.
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> </ul>
-	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
lf on skin	Take off contaminated clothing.
or clothing:	<ul> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>
	Call a poison control center or doctor for treatment advice.
lf inhaled:	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to- mouth, if possible.</li> </ul>
	Call a poison control center or doctor for further treatment advice.

**NOTE TO PHYSICIAN:** Acephate is a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure but decisions regarding treatment will usually need to be made before test results are available. 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.

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.** 

#### EPA REG. NO. 34704-862

#### EPA EST. NO. 34704-MS-001

### NET WEIGHT 5.0 LB (CONTAINS TWO 2.5 LB WSP PACKETS)

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ACCEPTED

JUN 1 9 2013 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:

1704-862 EPA. Reg. No:\_\_\_

EXP 03/13 RED

#### **PRECAUTIONARY STATEMENTS** HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, and Viton. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart, Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Socks and shoes
- · Chemical-resistant gloves

#### In addition, all mixers and loaders and all applicators using low-pressure hand wand application equipment must wear:

 A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N. R. P. or HE filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

See engineering controls for additional requirements.

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.

#### **Engineering Controls**

Water-soluble packages when used correctly gualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40CFR 170.240(d)(4)].

#### Mixers and loaders using water-soluble packets must:

- wear the personal protective equipment required above for mixers/loaders, and
- he provided, must have immediately available, and must use in an emergency, such as a broken package, spill, or equipment breakdown, the following PPE: coveralls, chemical-resistant footwear and a NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N. R. P. or HE filter.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

The use of human flaggers is prohibited.

### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash thoroughly with soap and water after handling and 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 toxic to birds. 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 cleaning equipment or disposing of equipment washwaters.

Exposed treated seed may be hazardous to birds and other wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

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 while bees are actively visiting the treatment area.

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### 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 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

Chemical-resistant gloves made out of any waterproof material

· Shoes plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides [40 CFR Part 170]. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter until sprays have dried.

# **DIRECTIONS FOR USE**

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

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

For use on turf, use limited to sod farms and golf courses, except when applying to mound or spot treatment for fire ant and harvester ant control.

Not for indoor residential use. For greenhouse use, use is limited to commercial greenhouses for use on ornamental, floral and foliage plants, and tobacco (floatbed application).

Do not apply with low pressure handwand except for control of fire ants as a mound treatment and when used on ornamental trees, shrubs, and floral plants grown for non-agricultural or non-commercial use.

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.

# FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, AND/OR ILLEGAL RESIDUES

#### **PRODUCT INFORMATION**

Acephate 90 WSP is an insecticide which controls a wide range of important pests in selected crops and in non-crop areas. The active ingredient is acephate, a water-soluble insecticide readily absorbed by plant roots and foliage to give systemic control of feeding insects. Insect pests are generally controlled more effectively by Acephate 90 WSP through ingestion than by contact. Repeat application of Acephate 90 WSP to maintain control only as directed.

FAILURE TO FOLLOW THE DIRECTION FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, AND/OR ILLEGAL RESIDUES.

#### TANK MIXES

NOTICE: Tank mixing of this product with any other product which is not specifically and expressly authorized by the label shall be at the exclusive risk of the 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.

#### CHEMIGATION

Apply only to cranberries with sprinkler irrigation systems and do not use any other type of irrigation systems. Do not apply this product through chemigation to any other crop.

#### **SPRAY DRIFT**

A variety of factors including weather conditions, (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground aerial, airblast, chemigation) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product. Do not allow this product to drift.

Observe the following precautions to minimize drift:

- All aerial, ground and air-assisted/airblast application equipment must be properly maintained and calibrated using water as carrier. Do not apply this product as an ultralow volume (ULV) spray except as specified in the instructions for use on non-crop wasteland. Do not apply in any carrier other than water.
- Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift and can 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.
- Do not apply at wind speeds greater than 10 mph at the application site.

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- Make applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph).
- Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage.

#### For Aerial Applications:

- Do not apply at heights greater than 10 feet (consistent with flight safety).
- 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 wing span or rotor diameter.

#### For Ground Applications:

• Do not apply at heights greater than 4 feet.

#### For Airblast Applications:

• Direct spray above foliage and turn off outward pointing nozzles at row ends and outer rows.

#### WATER SOLUBLE PACKAGES

The enclosed pouches, or packages, are water-soluble. Do not allow pouches to become wet prior to adding to the spray tank. Do not handle pouches with wet hands or wet gloves. Do not remove water-soluble pouches from overwrap except to add directly to the spray tank. Refer to the Table of Equivalents to calculate the number of packages to use. Always reseal overwrap bag to protect remaining unused pouches.

#### **PREPARATION OF SPRAY SOLUTION**

To prepare spray solution, drop the unopened packet(s) of Acephate 90 WSP into a spray tank containing at least one-half of the total quantity of water required. Add remaining water directed toward the water-soluble pouch with the agitator running until the spray volume is reached. Do not add any liquid fertilizers, micronutrients or adjuvants to the spray solution until the Acephate 90 WSP has completely dissolved. Acephate 90 WSP should completely dissolve in approximately 15 minutes. Dissolution rate may be slowed by cold water, lack of agitation, or water containing high concentrations of boron or sulfur. Application of Acephate 90 WSP to maintain control should be repeated only as directed.

Amount of Acephate 90 WSP Per Acre	Acres Treated by a 5.0 Lb Package (Two 2.5 Lb Water-Soluble Pouches)	Acres Treated by One 2.5 Lb Water-Soluble Pouch
0.08 lb	62.5	31
2.5 oz	32	16
3.2 oz	25	12.5
3.25 oz	24.6	12.3
0.25 lb	20	10
0.28 lb	17.8	8.9
0.4 lb	12.5	6
0.5 lb	10	5
0.56 lb	8.9	4.5
0.8 lb	6.25	3.1
1.0 lb	5	2.5
1.1 lb	4.5	2.3
2.2 lb	2.3	1.1
2.75 lb	1.8	0.9
3.4 lb	0.7	0.4
4.3 lb	1.2	0.6
5.5 lb	1	0.5

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#### COTTON

PHI (pre-harvest interval) denotes number of days to harvest. **RESTRICTIONS:** 

- Do not use treated seed for food or feed purposes or process for oil.
- Do not feed treated forage or gin trash to livestock.
- Do not allow animals to graze on treated areas.
- Do not apply more than 4.0 lb Al/A/crop cycle. This includes all methods of application.
- The maximum single aerial application rate for use in California and Arizona is 1.0 lb Al/A. For all remaining areas, the maximum single aerial application rate is 0.75 lb Al/A.

#### **COTTON: IN-FURROW**

By Ground: At-Planting Application: 3.0 to 5.0 gal/A of spray

PESTS	RATES OF	USE INFORMATION	MINIMUM SPRAY
CONTROLLED	Acephate 90 WSP/A		INTERVAL (DAYS)
Aphids* Black (Greasy) cutworm (Except CA) Thrips (including Western flower thrips) *Excluding Cotton aphids in AZ & CA	0.56 to 1.1 lb <b>NOTE:</b> For the Black Lands Region of Texas, use the 1.1 lb/A application rate	Use flat-fan nozzles for in-furrow application. Align nozzles to ensure good spray deposition into the seed furrow. Do not use cone type nozzles since unacceptable spray deposition may occur. Securely fasten spray-system tubing to furrow opener and check frequently to ensure proper positioning and operation. Acephate 90 WSP can be mixed with fungicides that are sprayed in-furrow for disease control.	N/A

#### **COTTON: FOLIAR**

By Ground: Minimum of 10.0 gals of water/A

PESTS CONTROLLED	RATES OF Acephate 90 WSP/A	USE INFORMATION	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Thrips (including Western flower thrips)	3.2 ozs	Apply when eggs or insects first appear. Repeat application as necessary to maintain control.*	7	21
Plantbugs (Lygus)	0.25 to 1.0 lb AZ & CA: 0.5 to 1.1 lbs	Apply when eggs or insects first appear. Use the higher specified rate within the rate range for Lygus adults that have migrated into cotton. Repeat application as necessary to maintain control.*	7	21
Fleahopper	0.25 lb	Apply when eggs or insects first appear. Repeat application as necessary to maintain control.*	7	21
Cotton aphids (excluding AZ & CA)	0.5 to 1.1 lbs	This insect may develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current control recommendations. Repeat application as necessary to maintain control.*	7	21
Whitefly (excluding Sweet potato whitefly/ Silverleaf whitefly)	0.5 to 1.1 lbs	Repeat application as necessary to maintain control.*	7	21
Armyworms (excluding Beet armyworm) Cabbage looper	1.1 lbs	Apply when eggs appear and repeat applications using 7-day spray intervals.*	. 7	21

Cont'd. next page

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### Cotton: Foliar cont'd.: By Ground: Minimum of 10.0 gals of water/A

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PESTS CONTROLLED	RATES OF Acephate 90 WSP/A	USE INFORMATION	MINIMUM SPRAY INTERVAL (DAYS)	РНІ
Bollworm Tobacco budworm (Adults, Larvae) Eggs/ DEADHATCH®	0.5 to 1.1 lbs (East of Rockies) 1.1 lbs (AZ & CA) 0.25 to 0.5 lb	Early Season: Use 0.5 lb/A for light infestation. Mid and Late Season: Use 0.8 to 1.1 lbs/A for moderate to severe infestations. Apply when eggs appear and repeat at 7-day spray intervals. Moths of budworm larvae are controlled by direct contact with spray. Moth kill is most likely to occur when late evening applications are made. DEADHATCH: Control of emerging larvae	7	21
Stink bugs	0.8 lb	by consumption of treated egg casings. Apply when eggs appear and repeat applications using 7-day spray intervals.*	7	21
Pink bollworm (AZ & CA)	1.1 lbs	Apply when insects appear and repeat at 7-day spray intervals.*	7	21
Cutworms	0.8 lb	Ground application is recommended. Aerial applications are less effective, but may be also used. Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of the plant. Apply when insects first appear or damage is first noted and repeat application as necessary to maintain control.*	7	21

#### USE RESTRICTIONS

\* Not to exceed a maximum of 4.0 lbs Al/A/crop cycle. This includes all methods of application.

#### **COTTON: FOLIAR**

By Air: Minimum of 3.0 gals water/A (Minimum of 5.0 gals water/A in AZ & CA)

PESTS CONT <u>ROLLED</u>	RATES OF Acephate 90 WSP	USE INFORMATION	MINIMUM SPRAY Interval (days)	РНІ
Thrips (including Western flower thrips)	3.2 ozs	Apply when eggs or insects first appear. Repeat application as necessary to maintain control.*	7	21
Plantbugs (Lygus)	0.25 to 0.83 lb 0.5 to 1.1 lbs (AZ & CA)	Apply when eggs or insects first appear. Use the higher specified rate within the rate range for Lygus adults that have migrated into cotton. Repeat application as necessary to maintain control.*	7	21
Fleahopper	0.25 lb	Apply when eggs or insects first appear. Repeat application as necessary to maintain control.*	7	21
Cotton aphids (excluding AZ & CA)	0.5 to 0.83 lb	This insect may develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current control recommendations. Repeat application as necessary to maintain control.*		21
Whitefly (excluding Sweet potato whitefly/ Silve <u>rleaf whitefly)</u>	0.5 to 0.83 lb 0.5 to 1.1 lbs (AZ & CA)	Repeat application as necessary to maintain control.*	7	21

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# Cotton: Foliar cont'd.: By Air: Minimum of 3.0 gals water/A (Minimum of 5.0 gals water/A in AZ & CA)

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PESTS CONTROLLED	RATES OF Acephate 90 WSP	USE INFORMATION	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Armyworms (excluding Beet armyworm) Cabbage looper	0.83 lb 0.5 to 1.1 lbs (AZ & CA)	Apply when eggs appear and repeat at 7-day spray intervals.*	7	21
Bollworm Tobacco budworm (Adults, Larvae)	0.5 to 0.83 lb (East of Rockies) 1.1 lbs (AZ & CA)	Early Season: Use 0.5 lb/A for light infestation. Mid and Late Season: Use 0.8 to 1.1 lbs/A for moderate to severe infestations. Apply when eggs appear and repeat at	7	21
Eggs/ DEADHATCH	0.25 to 0.5 lb	7-day spray intervals.* Moths of budworm larvae are controlled by direct contact with spray. Moth kill is most likely to occur when late evening applications are made. <b>DEADHATCH:</b> control of emerging larvae by consumption of treated egg casings.		
Stink bugs	0.83 lb	Apply when eggs appear and repeat at 7-day spray intervals.*	7	21
Pink bollworm (AZ & CA)	1.1 lbs	Apply when insects appear and repeat at 7-day spray intervals.*	7	21
Cutworms	0.8 lb 0.8 to 1.1 lbs (AZ & CA)	Ground application is recommended. Aerial applications are less effective, but may be used. Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of plant. Apply when insects first appear or damage is first noted and repeat application as necessary to maintain control.	7	21

USE RESTRICTIONS \*Not to exceed a maximum of 4.0 lbs AI/A/crop cycle. This includes all methods of application.

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#### **COTTON TANK MIXES**

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. Observe all restrictions and precautions which appear on all product labels. The most restrictive labeling applies when using a tank mix.

#### **COTTON TANK MIX: FOLIAR**

**By Ground:** Minimum of 10.0 gals water/A of spray **By Air:** 3.0 to 10.0 gals/A of spray (minimum of 5.0 gals water/A in CA)

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#### **USE RESTRICTIONS:**

- Do not feed gin trash or treated forage to livestock.
- Do not allow animals to graze on treated areas.
- Do not apply more than 4.0 lbs Al/A/crop cycle. This includes all methods of application.
- The maximum single aerial application rate for use in California and Arizona is 1.0 lb AI/A. For all remaining areas, the maximum single aerial application rate is 0.75 lb AI/A.

PESTS CONTROLLED	ACEPHATE 90 WSP AND TANK MIX Partner	AMOUNT OF ACEPHATE 90 WSP + TANK MIX PARTNER/A	USE INFORMATION	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Sweet potato whitefly (Silverleaf whitefly)	Acephate 90 WSP + Danitol® 2.4 EC Spray	0.5 lb + 10-2/3 to 16.0 fl ozs	Follow all applicable directions, restrictions, and precautions on the EPA registered label for Danitol 2.4 EC Spray.	3	21
Armyworms (excluding Beet armyworm) Bollworm Cabbage looper Cotton aphid Cutworms Fleahopper Grasshoppers Pink bollworm Plantbugs (Lygus, Mirids) Salt marsh caterpillar Thrips (Including Western flower thrips) Tobacco budworm Whitefly (Excluding Sweet potato/ Silverleaf whitefly)	Acephate 90 WSP + Warhawk®	0.28 to 1.1 lbs (ground) or 0.28 to 0.83 lb (aerial) + 1.0 to 2.0 pts	Follow all applicable directions, restrictions and precautions on the EPA registered label for Warhawk. <b>Cutworms:</b> Use of 0.8 lb/A Acephate 90 WSP <b>By Ground:</b> Ground application is recommended. Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of the plant. <b>By Air:</b> Aerial applications are less effective, but may be used. Apply when insects first appear or when damage is first noted.	7	21

#### **RESISTANCE-MANAGEMENT**

For cotton pest control programs, especially those for control of silverleaf whitefly populations, employ a properly designed resistance-management strategy. Such resistance-management strategies include mixture or rotation of alternative classes of chemistry including organophosphates, carbamates, pyrethroids or insect growth regulators. Consult your state or area agricultural extension service for local resistance management strategies and advice on alternative insecticides.

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# COTTON TANK MIXES WITH PYRETHROIDS USE RESTRICTIONS:

- Do not feed gin trash or treated forage to livestock.
- . Do not allow livestock to graze on treated areas.
- Do not apply more than 4.0 lbs Al/A/season. This includes all methods of application. This includes the use of Acephate 90 WSP as an in-furrow at planting treatment, all foliar spray, liquid in-furrow application and seed treatment uses.

Use synthetic pyrethroids within the guidelines of state and/or regional resistance management programs and recommendations.

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. Observe all restrictions and precautions, which appear on all product labels. The most restrictive labeling applies when using a tank mix.

#### **COTTON TANK MIX: FOLIAR**

**By Ground:** Minimum of 10.0 gals water/A of spray

By Air: 3.0 to 10.0 gals/A of spray (minimum 5.0 gals water/A in CA).

PESTS CONTROLLED	ACEPHATE 90 WSP AND TANK MIX PARTNER	AMOUNT OF ACEPHATE 90 WSP + TANK MIX Partner/A	USE INFORMATION	MINIMUM SPRAY INTERVAL (DAYS)	РНІ
Aphids Bollworm Cabbage looper Cotton leaf perforator Cutworms Fall armyworms Fleahoppers Pink bollworm (AZ &CA) Plantbugs Stinkbugs Sweet potato/ Silverleaf whitefly. Thrips (including Western flower thrips) Tobacco budworm	Acephate 90 WSP + one of the following: Holster™* Asana® XL* Tombstone™ or Tombstone™ Helios® Sniper® Karate® 1E (except CA)	0.5 to 1.1 lbs (ground) or 0.5 to 0.83 lb (air) + one of the following: Refer to the Holster approved label for use instructions. Refer to the Asana XL approved label for use instructions. Refer to the Tombstone or Tombstone Helios approved label for use instructions. Refer to the Sniper approved label for use instructions. Refer to the Karate 1E approved label for use instructions.	Apply when eggs or insects first appear or damage is first noted. <b>Stink bugs:</b> Use 0.83 lb/A of Acephate 90 WSP. <b>*Cutworms:</b> Use 0.83 lb/A of Acephate 90 WSP. <b>By Ground:</b> Ground application is recommended. Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of the plant. <b>By Air:</b> 3.0 to 10.0 gals/A spray (minimum 5.0 gals/A in CA) Aerial applications are less effective, but may be used. Repeat applications as necessary to maintain control.*	7	21
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#### **USE RESTRICTIONS**

\*Do not apply more than a maximum of 4.0 lbs Al/A/season. This includes all methods of application.

#### **RESISTANCE MANAGEMENT**

For cotton pest control programs, especially those for control of silverleaf whitefly populations, employ a properly designed resistance-management strategy. Such resistance-management strategies include mixture or rotation of alternative classes of chemistry including organophosphates, carbamates, pyrethroids or insect growth regulators. Consult your state or area agricultural extension service for local resistance management strategies and advice on alternative insecticides.

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## FIELD CROPS

PHI (pre-harvest interval) denotes number of days to harvest.

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CROP	INSECTS	AMOUNT OF ACEPHATE 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY	РНІ
Peppermint, Spearmint	Alfalfa looper Aphids Cutworm	1.11 lbs	AND RESTRICTIONS Make the initial application when eggs or insects first appear using a minimum of 20.0 to 100 (ground) or 5.0 to 10.0 (aerial) gals of water/A. <b>RESTRICTIONS</b> The grazing of animals on treated areas and the feeding of spent mint hay to animals is prohibited. Do not apply more than 2.0 lbs AI (2.22 lbs product)/A/season. Maximum of 2 applications/crop season.	INTERVAL (DAYS) 7	14
Peanuts (for postemergence, foliar, ground / aerial)	Grasshoppers Thrips Corn earworms Fall armyworms Leafhopper Loopers Velvetbean caterpillar	0.28 to 0.55 lb 0.55 to 0.83 lb 0.83 to 1.11 lbs	Apply in water at 10.0 to 50.0 gals spray/A by ground or in 5.0 to 10.0 gals spray/A by air. Begin applications when insects first appear and repeat as needed to maintain control. <b>RESTRICTIONS</b> Do not feed treated forage or hay to livestock or allow animals to graze treated areas. Do not apply more than 4.0 lbs Al (4.44 lbs product)/A/crop cycle. This includes all methods of application.	3 (for application rates of 0.55 lb/A or less) 7 (for application rates greater than 0.55 lb/A)	14 (of digging)
Soybeans	Grasshopper Thrips Potato leafhopper Stinkbugs Armyworms (except Beet) Bean leaf beetle Cabbage looper Green cloverworm Mexican bean beetle Soybean aphid Three-cornered alfalfa hopper Velvetbean caterpillar	0.28 to 0.55 lb 0.55 to 1.1 lbs 0.83 to 1.1 lbs	By Air: 5.0 to 10.0 gals/A of spray By Ground: 10.0 to 50.0 gals/A of spray RESTRICTIONS Do not graze or cut vines for hay or forage. Do not apply more than 1.5 lbs Al/A (1.6 lbs of Acephate 90 WSP)/season.	3 (for application rates of 0.55 lb/A or less) 7 (for application rates greater than 0.55 lb/A)	14

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#### TOBACCO

# TOBACCO TRANSPLANT WATER APPLICATION USE RESTRICTIONS: (Use Prohibited in CA)

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CROP	INSECTS	AMOUNT OF Acephate 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS
Tobacco	Cutworms Flea beetle Green peach aphid Tobacco aphid Tobacco thrips	0.83 lb	Provides control of early season flea beetles, green peach aphids, tobacco aphids, and cutworms for approximately 3 to 4 weeks after transplanting. For later season control of these insects, apply a foliar spray of Acephate 90 WSP. Apply in a minimum of 100 gals of water/A. <b>RESTRICTIONS</b> Do not apply more than 0.83 lb Acephate 90 WSP/A as a transplant water application as some phytotoxicity may occur. Do not apply more than 4.0 lbs AI (4.44 lbs product)/A/crop cycle. This includes all methods of application.

Make transplant-water applications using mechanical transplant equipment only. Using such equipment, the insecticide/water mixture is mechanically applied directly into the soil along with the transplanted plants.

#### **TOBACCO FOLIAR APPLICATION**

**USE RESTRICTIONS:** (Use Prohibited in CA). PHI (pre-harvest interval) denotes number of days to harvest.

CROP	INSECTS	AMOUNT Acephate 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	PH
Tobacco Gi (Flue-Cured, Fl Air Cured, Dark Gi Fire Cured) Hi Tc St Tc Bi Ca	Grasshoppers Flea beetle Green peach aphid Hornworm <u>Tobacco thrips</u> Stinkbugs Tobacco aphid Vegetable weevils	0.28 to 0.55 lb 0.55 lb 0.55 to 0.83 lb	Apply in 10.0 to 50.0 gals water/A with ground equipment or a minimum of 3.0 gals/A by air. Apply spray at a minimum of 7 days if necessary to mainta control. <b>RESTRICTIONS</b> Do not apply more than 4.0 lbs AI (4.44 lbs product)/A/cro cycle. This includes all methods of application.	3
	Budworm Cabbage looper Cutworm	0.83 lb		

### **TOBACCO PLANT BED APPLICATION USE RESTRICTIONS**

(Use Prohibited in CA)

CROP	INSECTS	AMOUNT Acephate 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS
Tobacco Bed Treatment	Cutworm Flea beetle Green peach aphid Tobacco aphid	0.83 lb	Apply to foliage at the equivalent of 1.0 tbsp in 1.0 gal of water/every 1000 sq ft of bed. Apply evenly to ensure thorough coverage. Apply spray at a minimum of 7 days if necessary to maintain control. <b>RESTRICTIONS</b> Do not apply more than 4.0 lbs AI (4.44 lbs product)/A/crop cycle This includes all methods of application.

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# TOBACCO FLOATBED/GREENHOUSE APPLICATION USE RESTRICTIONS

(Use Prohibited in CA)

CROP	INSECTS	AMOUNT ACEPHATE 90 WSP	FURTHER USE INSTRUCTIONS AND RESTRICTIONS
Tobacco	Cutworm Flea beetle Green peach aphid Tobacco aphid	0.83 lb	Apply to foliage at the equivalent of 1.0 tbsp in 3.0 gals of water/every 1000 sq ft of bed. Apply evenly to ensure thorough coverage. Dispose of floatbed water in the transplanted field through the transplant water or through foliar spray. Apply spray at a minimum of 7 days if necessary to maintain control. <b>RESTRICTIONS</b> Do not apply more than 4.0 lbs AI (4.44 lbs product)/A/season. This includes all methods of application.

#### FRUIT CROP

CROP	INSECTS	AMOUNT OF Acephate 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Cranberries	Cranberry blossom worm False armyworm Fireworms Gypsy moth Spanworms Sparganothis	1.11 lbs	Apply using sufficient water to achieve thorough coverage (ground) or in a minimum of 2.0 gals of water/A (aerial). Do not apply from start of bloom until all berries have set. Apply in water by air, ground or with sprinklers. <b>RESTRICTIONS</b> When applied via irrigation system, only sprinkler type irrigation equipment can be used. Maximum of one application /growing season. Do not apply more than 1.0 lb Al (1.11 lbs product)/A/crop cycle. This includes all methods of application.	N/A	90

#### SPRINKLER IRRIGATION APPLICATION TO CRANBERRIES

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, contact State Extension Service specialists, equipment manufacturers or other experts.

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.

**Solid Set System:**\*\* 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.

**Center Pivot Systems:**\*\* Inject the specified dosage per acre continuously for one complete revolution of the system. \*\*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 turn to ensure adequate mixing.

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

#### **USE RESTRICTIONS**

Apply to cranberries only by sprinkler irrigation systems. Do not apply by chemigation to any other crop, or this crop using any other type of irrigation system.

For overhead chemigation, apply only when wind speed is 10 mph or less.

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.

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.

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, 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 that 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.

#### **VEGETABLE CROPS**

PHI (pre-harvest interval) denotes number of days to harvest.

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	
Beans & Lima	Fleahoppers	0.28 to 0.55 lb	Make the initial application when	7	14 (dry
Beans (Dry &	Grasshoppers		eggs or insects first appear using		beans)
Succulent)	Aphids	0.55 to 1.11 lbs	a minimum of 20.0 to 100 gals		2000)
Excluding	Beanleaf beetle		(ground) or 2.0 gals (aerial) of		1 (lima
succulent green	Bean leafroller		water/A. For severe insect		beans
beans (includes	Cabbage looper		infestations, use the higher listed		succulent
string beans,	Cutworms		rates.		forms)
snap beans,	Green		USE RESTRICTIONS		,
and wax beans.)	cloverworm		Do not apply more than 2.0 lbs Al		
Succulent green	Leafhoppers		(2.22 lbs product)/A/crop cycle.		
beans use is	Mexican bean		The feeding of treated vines to		
permitted ONLY	beetle		livestock is prohibited.		
if grown for	Plantbugs		Use on succulent green beans is		
seed.	(Lygus)		prohibited (includes string beans,		
	Soybean looper	]	snap beans, and wax beans).		
	Thrips		Do not feed crop residues to		
	Whitefly		livestock or allow animals to graze.		
	Armyworms	0.83 to 1.11 lbs	Do not apply to succulent beans		
	Corn earworm		grown for fresh market or		
	European		processing. No portion of the		
	cornborer		succulent bean plant may be used		
			or distributed for food or feed		
			purposes. Seeds grown from		
			succulent beans shall bear a tag		
	ļ		or container label which forbids		
			use of the seed for human		
			consumption or animal feed.		
			Seeds grown from succulent beans		
			may not be distributed for human		
	l		consumption or animal feed.	[	

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**Vegetable Crops cont'd.:** PH! (pre-harvest interval) denotes number of days to harvest.

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CROP	INSECTS	AMOUNT OF Acephate 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Brussels Sprouts,	Green peach aphid	0.55 to 1.11 lbs	Make initial application when eggs or insects first appear using a	3 (for application	14
Cauliflower	Cabbage looper Diamondback moth	1.11 lbs	minimum of 25.0 to 150 gals (ground) or 5.0 gals (aerial) of water/A.	rates of 0.55 lb/A or less)	
	Imported cabbageworm		Use the higher listed rate when heavy infestations of aphids are	7 (for application	
			present. USE RESTRICTIONS	rates greater than 0.55 lb/A)	
			Do not apply more than 2.0 lbs Al (2.22 lbs product)/A/crop cycle. The feeding of treated trimmings		
			or the grazing of livestock in treated areas is prohibited.		
Celery	Green peach aphid	0.55 to 1.11 lbs	Make the initial application when eggs or insects first appear using a minimum of 50.0 to 100 gals	3 (for application rates of 0.55 lb/A	21
			(ground) or 5.0 gals (aerial) of water/A. USE RESTRICTIONS	or less)	
			All celery must be trimmed (tops removed before shipment). The	(for application rates greater than	
	Beet & Fall	1.11 lbs	use of treated tops for food/feed is prohibited.	0.55 lb/A)	
Tead Lettuce	armyworm Cabbage looper Aster leafhopper	0.55 to 1.11 lbs	Do not apply more than 2.0 lbs Al (2.22 lbs product)/A/crop cycle. Apply using a minimum of 10.0 to	3	21
(Crisphead Type Only)	Green peach aphid		60.0 gals (ground) or 5.0 gals (aerial) of water/A.	(for application rates of 0.55 lb/A	21
	Armyworm (excluding	1.11`lbs	Applications may be made in spring, summer, and early fall in	or less)	
	Beet armyworm) Cabbage looper		all areas; winter applications may be made in AZ, CA, FL, and TX; and late fall applications may be	7 (for application rates greater than	
			made in AZ. In the desert areas of AZ and CA, do not apply after the	0.55 lb/A)	
			first head begins to form in crops which germinate from mid- September through November.		
			USE RESTRICTIONS The feeding of trimmings to		
			livestock, and the grazing of animals on treated areas are		
			prohibited. Maximum of 5 applications/crop season.		
			Do not apply more than 2.0 lbs Al (2.22 lbs product/A/crop cycle.		
Peppers (non Bell type)	Aphids	0.55 lb	Apply using a minimum of 40.0 to 150 gals of water/A. USE RESTRICTIONS	7	7
			Use limited to Midwestern and Eastern states (AL, AR, CT, DE, DC,		
			FL, GA, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, NE, NH, NJ, NY, NC, ND, OH, OK, PA, RI,		
			SC, SD, TN, TX, VT, VA, WV, WI) and to PR.		
			Maximum of 2 applications/crop season.		
			Do not apply more than 1.0 lb Al (1.11 lbs product)/A/crop cycle.		

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### Vegetable Crops cont'd.:

PHI (pre-harvest interval) denotes number of days to harvest.

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AMOUNT OF CROP	INSECTS	ACEPHATE 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	РНІ
Peppers (Bell type)	Grasshoppers Cabbage looper Green peach aphid Tobacco hornworm	0.28 to 1.11 lbs 0.55 to 1.11 lbs	Make the initial application when eggs or insects first appear using a minimum of 25.0 to 150 gals (ground), 3.0 gals (aerial), or 5.0 gals (aerial in CA) of water/A. <b>USE RESTRICTIONS</b> Do not apply more than 2.0 lbs Al (2.22 lbs product)/A/crop cycle. crop cycle.	7	7

#### **NON-BEARING CITRUS**

PHI (pre-harvest interval) denotes number of days to harvest. **RESTRICTIONS:** 

• Do not graze treated area.

• Do not harvest citrus fruits for one year after treatment.

CROP	INSECTS	AMOUNT OF Acephate 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	рні
CITRUS (Non-bearing)	Aphids Grasshoppers Katydid Mealybugs Orangedogs Plantbugs Thrips Whiteflies (except Sweet Potato/ Silverleaf)	0.55 lbs	Make initial spray application to individual juvenile or non-bearing trees when eggs or insects first appear using a minimum of 100 to 200 gals of water/A by ground equipment.	7	N/A
		0.83 lbs	Make initial spray application to individual juvenile or non-bearing trees using a minimum of 100 to 200 gals of water/A by ground equipment. <b>USE RESTRICTIONS</b> Use limited to FL.		
	Citrus Blackfly (not registered for use in CA)	0.5 to 0.83 lb	Apply when eggs or insects first appear. Use the high rate when a heavy infestation is present. Repeat spray application at 7 to 10-day intervals.	N/A	

### SPECIALTY USES

This product is not for outdoor residential use on lawns, turf, home gardens, ornamentals, flowers, shrubs or trees. This restriction applies to all uses listed on this label.

CROP	INSECTS	AMOUNT OF Acephate 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS
Non-Crop Areas (Field Borders, Fencerows, Roadsides, Ditch-banks and Borrow Pits)		0.28 lb	Apply using a minimum of 10.0 gals (ground), 1.0 gal (aerial), or 5.0 gals (aerial in CA) of water/A. <b>USE RESTRICTIONS</b> The grazing or feeding of vegetation cut from treated areas is prohibited.

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## NON-CROP AREAS (WASTELAND)

APPLICATION METHOD	INSECTS	AMOUNT OF Acephate 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS
Foliar Ground/Aerial	Black grass 1.6 to 2.2 ozs bugs Grasshoppers Mormon	1.6 to 2.2 ozs	Apply using a minimum of 10.0 gals (ground), 1.0 to 5.0 gals (aerial), or 5.0 gals (aerial in CA) of water/A. <b>USE RESTRICTIONS</b> The grazing or feeding of vegetation cut from treated areas
	crickets		is prohibited. Do not make more than 1 application/season.

## CONTAINER GROWN NURSERY STOCK

PLANTS	INSECTS	AMOUNT OF ACEPHATE 90 WSP	TIME OF APPLICATION	APPLICATION DIRECTONS
Container Grown Nursery Stock (Arborvitae, Azalea, Camellia, Rhododendron, Roses, Viburnum, Yew)	Black vine weevil Strawberry root weevil	0.83 lb	Thorough drench application of liquid formulation should be made by mid-September for greenhouse stock and by mid-October for outdoor stock. Consult your local county extension agent for information on the identification and control of root weevils on ornamentals.	
	Ants (excluding Fire, Harvester, Carpenter and Pharaoh)		Apply as needed to control the pest.	

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#### **ORNAMENTAL TREES & SHRUBS**

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Restrictions: Do not apply by low pressure handwand. This product is not for outdoor residential use on lawns, turf, home gardens, ornamentals, flowers, shrubs or trees. This restriction applies to all uses listed on this label.

applies to all L	ises listed on this lai		MINIMUM	1	
PLANTS	INSECTS	AMOUNT ACEPHATE 90 WSP/100 GALS	TIME OF APPLICATION	SPRAY INTERVAL (DAYS)	APPLICATION DIRECTIONS AND RESTRICTIONS
Trees and Shrubs (except Flowering Crabapple, see below)	Aphids Bagworms Birch leafminer Tent caterpillar* Lace bugs Leafrollers	0.28 to 1.1 lbs (4.4 to 17.7 ozs)	As the insects or damage first appear.	3 (for applica- tion rates of 0.55 lb/A or less) 7	Apply the specified amount of Acephate 90 WSP in 100 gals water with a hydraulic sprayer. The addition of a suitable sticker improves control of Gypsy moth larvae.
	Douglas fir Tussock moth larvae Gypsy moth larvae* Webworms	0.55 to 1.11 lbs (8.7 to 17.7 ozs)	As insects begin to appear.	(for applica- tion rates greater than 0.55 lb/A)	*Mist blower application. Adjust rates to 1.11 lbs/100 gals water for Gypsy moth control and 0.83 lb/100 gals water for Tent caterpillar control.
	Scales (Crawlers)	0.55 to 1.11 lbs (8.7 to 17.7 ozs)	As crawlers begin to appear. Repeat applications, at a 2-week or more interval, may be necessary where there is continuous crawler production.		Application to Huckleberry, Balm of Gilead, Cottonwood, Lombardy Poplar and <i>Viburnum suspensum</i> may result in phytotoxicity. Nursery crops - Before treating large plantings, spray only a few plants and pbserve two weeks for phytotoxicity.
	Ponderosa pine needle miner	0.55 to 1.11 lbs (8.7 to 17.7 ozs)	Time of application is important. Consult your Farm Advisor or County Extension Agent.		Apply the specified amount of Acephate 90 WSP in 100 gals water with a hydraulic sprayer as a full coverage
	Grasshoppers	0.55 to 1.11 lbs (8.7 to 17.7 ozs)	As the grasshoppers begin to appear.	-	spray.
	California oakworm Cankerworms (Spring & Fall)	0.28 to 1.1 lbs (4.4 to 17.7 ozs)	As the insects begin to appear. Use the higher specified rate within the rate range when the larger larvae are present.		Apply the specified amount of Acephate 90 WSP in 100 gals water with a hydraulic sprayer.
	Nantucket pine tip moth larvae	1.11 lbs (17.7 ozs)	Time of application is important. Consult your Farm Advisor or County Extension Agent. Repeat applications will be required for subsequent generations.		
	Root weevil adults	1.11 lbs (17.7 ozs)	Apply when first feeding damage occurs. Repeat applications at four week intervals until the first heavy frost, may be necessary for complete foliage protection.		Apply the specified amount of Acephate 90 WSP in 100 gals water with a hydraulic sprayer as a full coverage spray.
	Box elder bugs Budworms Leafhoppers Sawflies	1.11 lbs (17.7 ozs)	As the insects begin to appear.		
	Japanese Beetle (17.7 ozs)	1.11 lbs begin to appear. Repeat applications, at 2-week intervals, may be necessary.	As the Japanese Beetles		

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## Ornamental Trees & Shrubs cont'd.: Restrictions: Do not apply by low pressure handwand.

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PLANTS	INSECTS	AMOUNT ACEPHATE 90 WSP/100 GALS	TIME OF APPLICATION	MINIMUM SPRAY INTERVAL (DAYS)	APPLICATION DIRECTIONS AND RESTRICTIONS
Trees and Shrubs (except Flowering Crabapple, see below)	Elm leaf beetle larvae	1.11 lbs (17.7 ozs)	As the larvae begin to appear. Acephate 90 WSP will not prevent Elm leaf beetle eggs from hatching.	3 (for applica- tion rates of 0.55 lb/A or less) 7 (for applica- rates greater	
Douglas Fir, Christmas Trees	Douglas fir needle midge	0.55 lb (8.7 ozs)	Make application no more than 2 weeks prior to bud burst. For additional pest management information, consult your county extension service.	than 0.55 lb/A) 3 days for rates up to and including 0.5 lb Al/A and 7 days for rates over 0.5 lb Al/A.	Apply a minimum of 2 weeks prior to bud burst using a minimum of 100 (ground) or 2.0 (aerial) gals of water/A. <b>USE RESTRICTIONS</b> Maximum of 1 application/ crop season. Do not apply more than 0.55 lb product/A/crop cycle.
Flowering Crabapples	Aphids Leafrollers Tent caterpillars	0.28 lb (4.4 ozs)	As the insects begin to appear.	28	Apply the specified amount of Acephate 90 WSP in 100 gals water with a hydraulic sprayer. <b>Note:</b> Phytotoxicity has occurred on the following Crabapple varieties: Hopa, Ichonoski, Malusfloribunda, Pink Perfection, Red Wine and Snow Cloud. <b>USE RESTRICTIONS</b> Do not apply more often than 3 times in a growing season.
Crepe Myrtle	Aphids	1.0 lb (160 oz)/16.0 gals of water	As aphids begin to appear.	3 days for rates up to and including 0.5 lb Al/A and 7 days for rates over 0.5 lb Al/A.	Make a paint-on slurry to the trunk in a band 6 to 12 inches above the ground by mixing the specified amount of Acephate 90 WSP. Remove the loose bark from the trunk areas to be treated. Completely paint a band around each trunk to a width twice its diameter. Make application to trunks within a zone 6 to 12 inches above the ground and below the point where branching begins. For multi-trunk plants be certain to treat all trunks. For either single or multi-trunk plants, make application as low as possible within the specified treatment zone.

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### **GOLF COURSE TURF**

#### **RESTRICTIONS:**

- DO NOT ALLOW LIVESTOCK TO GRAZE TREATED AREAS. DO NOT FEED TREATED GRASS TO LIVESTOCK.

- Use limited to golf courses.
  Aerial applications to turf are prohibited.
  This product is not for outdoor residential use on lawns, turf, home gardens, ornamentals, flowers, shrubs or trees. This restriction applies to all uses listed on this label.
- Do not exceed 4.0 lbs ai per acre per year.

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	INIOFOTO	ACEPHATE 90		
PLANTS		WSP/1000 SQ FT	TIME OF APPLICATION	APPLICATION DIRECTIONS
Golf Course Turf	Fall armyworm Southern armyworm Yellow striped <u>armyworm</u> Cutworm	0.4 to 1.0 oz (1.1 to 2.71 lbs/A)	As the insects appear. A repeat application at 2-week intervals may be necessary.	Apply the specified amount of Acephate 90 WSP/1000 sq ft. Use a minimum of 5.0 gals water/1000 sq ft to obtain good coverage.
		(2.71 to 4.44 lbs/A)		
	Chinch bugs	1.0 to 1.6 ozs (2.71 to 4.44 lbs/A)	Apply as needed for adult population knockdown. Repeat application at 10 to 14 days if needed.	Apply the specified amount of Acephate 90 WSP/1000 sq ft. Use 1.0 to 15.0 gals water/1000 sq ft to obtain good coverage.
	Sod webworm ( <i>Crambus</i> spp.)	0.4 to 0.8 oz (1.11 to 2.22 lbs/A)	As sod webworms begin to appear. Use the higher specified rate within the rate range when quick knock down is needed or with heavy infestations. Repeat application may be necessary. A repeat application at 7-day intervals may be necessary.	Apply the specified amount of Acephate 90 WSP/1000 sq ft. Use 1.0 to 15.0 gals water/1000 sq ft to obtain good coverage.
	Leafhopper	0.8 oz (2.22 lbs/A)	As the leafhoppers begin to appear. A repeat application at 7-day intervals may be necessary.	Apply the specified amount of Acephate 90 WSP/1000 sq ft. Use 1.0 to 15.0 gals water/1000 sq ft to obtain good coverage.
	Mole crickets (except CA)	0.8 to 1.6 ozs (2.22 to 4.44 lbs/A)	As mole crickets begin to appear. For knockdown of existing populations, more than one application may be required throughout the growing season. For heavy infestations, use the higher rate range.	Apply the specified amount of Acephate 90 WSP/1000 sq ft. Use 1.0 to 15.0 gals water/1000 sq ft to obtain good coverage. Apply during late afternoon or early evening hours and after irrigation. The use of a lemon fragrance substance in the spray mix may enhance control by acting as a flushing agent and thus provide increased mole cricket contact with the Acephate 90 WSP. The following lemon-scented products have been shown to be effective flushing agents: Lemon Joy, Lemon Palmolive and Might Myrt Products Manufacturer- Base Pure Lemon Fragrance. The use rate for these lemon-scented products is 2.0 tsp/gal of water for small total mix volumes or 5.0 fl ozs/50.0 gals of water for a large total mix volume. <b>USE RESTRICTIONS:</b> Do not irrigate after application.
	Grasshoppers Greenbug ( <i>Schizaphis</i> graminun)	0.4 oz (1.11 lbs/A)	Apply when insects or their damage first appear. Repeat as necessary. A repeat application at 7-day intervals may be necessary.	Apply the specified amount of Acephate 90 WSP/1000 sq ft. Use 4.0 to 15.0 gals water/1000 sq ft to obtain good coverage. <b>USE RESTRICTIONS:</b> Do not mow turfgrass for at least 24 hrs after application.

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# *Golf Course Turf cont'd.:* USE RESTRICTIONS:

- DO NOT ALLOW LIVESTOCK TO GRAZE TREATED AREAS. DO NOT FEED TREATED GRASS TO LIVESTOCK.
- Use limited to golf courses.
- Aerial applications to turf are prohibited.
- This product is not for outdoor residential use on lawns, turf, home gardens, ornamentals, flowers, shrubs or trees. This restriction applies to all uses listed on this label.
- Do not exceed 4.0 lbs ai per acre per year.

PLANTS	INSECTS	ACEPHATE 90 WSP/1000 SQ FT	TIME OF APPLICATION	APPLICATION DIRECTIONS
Dichondra (Golf Course Turf)	Cutworm Flea beetle Southern armyworm Yellow striped armyworm	0.8 to 1.6 ozs (2.2 to 4.44 lbs/A)	As the insects appear. Repeat at 2 week intervals as necessary.	Apply the specified amount of Acephate 90 WSP/1000 sq ft. Use a minimum of 15.0 gals water/1000 sq ft to obtain good coverage.

**OUTDOOR WASP AND PERIMETER SPRAY** 

#### USE RESTRICTIONS:

- The use of low pressure handwand equipment for perimeter or wasp treatments is prohibited.
- This product is not for outdoor residential use on lawns, turf, home gardens, ornamentals, flowers, shrubs or trees. This restriction applies to all uses listed on this label.

LOCATION	INSECTS	AMOUNT ACEPHATE 90 WSP PER GALLON	TIME OF APPLICATION	APPLICATION DIRECTIONS
Outdoor Wasp and Perimeter Area	Wasps	1.6 ozs (0.10 lb)	Treat early or late in the day as wasps are less active during these times.	Apply the specified amount of Acephate 90 WSP/gal. Apply as a spot treatment to the nest, nest entrance, and surrounding areas where the wasps land.
	Ants (excluding fire, harvester carpenter and pharaoh ants) Cockroaches Crickets Earwigs Pillbugs (Perimeter treatment)	1.6 ozs (0.10 lb)	As insects appear.	Apply the specified amount of Acephate 90 WSP/gal. Apply to a band of soil 6 to 10 ft adjacent to the structure and to a height of 2 to 3 ft from the foundation where pests may be active or may find entrances. Also as a residual spray or with a paint brush to surfaces of buildings, window frames, shutters, entryways, screens, eaves, patios, garages, carports, around garage areas and other areas where the insects may be found.

#### **OUTDOOR FLORAL CROPS AND GROUND COVERS**

#### **USE RESTRICTIONS:**

· Do not apply using low-pressure hand-wand.

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• This product is not for outdoor residential use on lawns, turf, home gardens, ornamentals, flowers, shrubs or trees. This restriction applies to all uses listed on this label.

PLANTS	PESTS CONTROLLED	ACEPHATE 90 WSP APPLICATION RATE/100 GALS	TIME OF APPLICATION	APPLICATION DIRECTIONS
Chrysan- themums Daisies Dahlias Easter Lily Gladioli Gypsophila Pachysandra Pansy Peony Roses Sedum Statice Strawflower Yarrow Zinnia	Aphids Lygus Thrips	0.5 lb (8.0 ozs)	As insects begin to appear. To maintain control repeat applications may be necessary. Allow a minimum of 14 days between applications.	Apply the specified amount of Acephate 90 WSP in 100 gals of water with a hydraulic sprayer as a full coverage spray. Multiple applications may cause slight tip burn or marginal leaf necrosis on some varieties. Test on a sample plant to determine if unacceptable damage occurs prior to application to all plants.
Boston Ivy Roses	Japanese beetle	1.11 lbs (17.7 ozs)	As Japanese beetles begin to appear. To maintain control, repeat applications may be necessary. Allow a minimum of 14 days between applications.	Applications to roses in flower may cause damage to flower.

#### COMMERCIAL GREENHOUSE FLORAL AND FOLIAGE PLANT CROPS

Phytotoxicity has occurred on the following foliage plants:

Bletchum gibbumPlectranthus australisCissus antarcticaPolypodium aureusFicus tríangularisPolystichumFittonia verschaffeltiPteris ensiformisMaranta leuconeura kerchoveanaTolmiea menziesiiPachystachya luteaPolystichum

Before treating large plantings, spray a test sample of plants and observe for 2 weeks for varietal phytotoxicity. Acephate 90 WSP applications on certain varieties of Poinsettias after bract formation may result in phytotoxicity.

Phytotoxicity has occurred on the following Chrysanthemum varieties:

Albatross	Pride
Bonnie Jean	Showoff
Dixie	Statesman
Garland	Tally Ho
Gem	Westward Ho
lceberg	Wild Honey

Before treating large Chrysanthemum plantings, spray a test sample of plants and observe for 2 weeks for varietal phytotoxicity.

#### **USE RESTRICTIONS:**

- Do not apply more often than every 5 days.
- Do not exceed 0.75 lbs of Al/100 gals water as a single application to crops grown for cut flower production and 1.0 lb Al/100 gals for all other greenhouse and outdoor ornamental plants.

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PLANTS	PESTS CONTROLLED	AMOUNT Acephate 90 WSP/100 Gallons	TIME OF APPLICATION	APPLICATION DIRECTIONS
Roses	Leafrollers	0.5 to 0.83 lb (8.7 to 13.3 ozs)	As leafrollers begin to appear. Use the higher specified rate within the rate range when large larvae are present.	Apply the specified amount of Acephate 90 WSP in 100 gals with a hydraulic sprayer as a full coverage spray. Applications to roses in flower may cause damage to flower.
Anthuriums Cacti Foliage Plants Orchids Poinsettia	Aphids Mealybugs Thrips Whiteflies	0.28 lb (4.3 ozs) 0.55 lb (8.7 ozs)	As aphids begin to appear. As insects begin to appear. To maintain control of mealybugs and whiteflies, repeat applications at a minimum of 14-day spray	Apply the specified amount of Acephate 90 WSP in 100 gals with a hydraulic sprayer as a full coverage spray. A wetting agent may be necessary when applying to difficult to wet foliage.
	Scales (Crawlers)	0.55 lb (8.7 ozs)	intervals. As insects begin to appear. To maintain control when there is continuous crawler production, repeat applications at a minimum of 14-day spray intervals.	- -
	Sweet Potato whiteflies (except CA)	0.28 lb (4.3 ozs) plus 10 2/3 fl ozs (0.2 lb Al) Tame® 2.4 EC Spray	Apply when insects first appear. If a population is well established, make one application of the tank mix and follow in 5 to 7 days with Tame alone at 16.0 fl ozs/100 gals (See Tame label for instructions).	Apply as a tank mix at a volume that ensures good coverage. To avoid potential resistance, follow the Tame label for specific instructions on the alternating use of Tame plus Acephate 90 WSP and Tame alone.
Carnations Chrysan- themums Roses	Aphids Thrips	0.55 lb (8.7 ozs)	As aphids begin to appear. As thrips begin to appear or at the tight flower bud stage. Apply as insects appear or at the tight flower bud stage. To maintain control, repeat applications may be necessary using the following restrictions: A minimum of 5 days between applications to roses. A minimum of 28 days between applications to Carnations and Chrysanthemums.	Apply with a hydraulic sprayer as a full coverage spray. Application to Chrysanthemums and Roses with open flowers will cause injury to the flowers.

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep pesticide in original container. Store in a cool, dry place away from excessive heat. Do not put concentrate or dilute into food or drink containers.

**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:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. Do not burn.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

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