

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 28, 2017

Mr. Solito A. Sumulong Manager of Registrations Loveland Products, Inc. P.O. Box 1286 Greeley, CO 60632

Subject: Label Amendment – Revisions to Mixing and Loading Language

Product Name: ACEPHATE 90 WSP EPA Registration Number: 34704-862 Application Date: May 10, 2017 Decision Number: 536024

Dear Mr. Sumulong:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Mr. Carmen J. Rodia, Jr. by phone at (703) 306-0327, or via email at <u>Rodia.Carmen@epa.gov</u>.

Sincerely,

Richard Gebken

Product Manager 10

Invertebrate & Vertebrate Branch 2

Registration Division (7505P)

Office of Pesticide Programs

Enclosure: Stamped "Accepted" Master Label, dated November 28, 2017

# **ACEPHATE 90** WSP

#### **INSECTICIDE IN A WATER SOLUBLE BAG**

**ACTIVE INGREDIENT:** 

# **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.
	Have person sip a glass of water if able to swallow.
	<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>
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
lf on skin or	Take off contaminated clothing.
clothing:	Rinse skin immediately with plenty of water for 15 to 20 minutes.
	Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if
	possible.
	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 additional information on this pesticide product, including health concerns, medical emergencies, or pesticide incidents, you may call 1-866-944-8565, 24 hours per day, 7 days per week.

# ACCEPTED

11/28/2017

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 34704-862

EPA REG. NO. 34704-862

EPA EST. NO. 34704-MS-001

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

EXP 0417

# 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 listed below.

#### Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Socks and shoes
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, or Viton ≥14 mils

## 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 packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607(d)]. Mixers and loaders handling this product while it is enclosed in intact water soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks, a chemical-resistant apron, and chemical-resistant gloves such as barrier laminate, butyl rubber  $\geq$ 14 mils, nitrile rubber  $\geq$ 14 mils, or Viton  $\geq$ 14 mils. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for **mixers**, **loaders**, **applicators and all other handlers** and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

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.

#### 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 such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, or Viton ≥14 mils
- 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.
- 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 (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

#### Handling Instructions

Follow these steps when handling pesticide products in WSPs.

- 1. Mix in spray tank only.
- 2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
- 3. Keep the WSP(s) in outer packaging until just before use.
- 4. Keep the WSP dry prior to adding to the spray tank.
- 5. Handle with dry gloves and according to the label instructions for PPE.
- 6. Keep WSP intact. Do not cut or puncture WSP.
- 7. Reseal the WSP outer packaging to protect any unused WSP(s).

## **Mixing Instructions**

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

- 1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
- 2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
- 3. Stop adding water and stop any agitation.
- 4. Place intact/unopened WSP(s) into the tank.
- 5. Do not spray water from a hose or fill pipe to break or dissolve the WSP(s).
- 6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.
- 7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
- 8. Stop agitation before tank lid is opened.
- 9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.
- 10. Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
- 11. Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
- 12. Use the spray solution when mixing is complete.

- 13. Maintain agitation of the diluted pesticide mix during transport and application.
- 14. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.

# WATER SOLUBLE PACKAGING DIRECTIONS TABLE OF EQUIVALENTS

Amount of Acephate 90 WSP/A	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 ozs	32	16
3.2 ozs	25	12.5
3.25 ozs	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 lbs	4.5	2.3
2.2 lbs	2.3	1.1
2.75 lbs	1.8	0.9
3.4 lbs	0.7	0.4
4.3 lbs	1.2	0.6
5.5 lbs	1	0.5

#### 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 pounds active ingredient per acre per crop cycle. This includes all methods of application.
- The maximum single aerial application rate for use in California and Arizona is 1.0 pound active ingredient per acre. For all remaining areas, the maximum single aerial application rate is 0.75 pound active ingredient per acre.

# **COTTON: IN-FURROW**

**By Ground:** At-Planting Application: 3.0 to 5.0 gallons per acre of spray

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

#### **COTTON: FOLIAR**

By Ground: Minimum of 10.0 gallons of water per acre

	RATES OF		MINIMUM SPRAY	
PESTS CONTROLLED	ACEPHATE 90 WSP/A	USE INFORMATION	INTERVAL (DAYS)	PHI
Thrips (including Western	3.2 ozs	Apply when eggs or insects first appear. Repeat applica-	7	21
flower thrips)		tion as necessary to maintain control.*		
Plantbugs (Lygus)	0.25 to 1.0 lb	Apply when eggs or insects first appear. Use the higher	7	21
- , ,	AZ & CA: 0.5 to 1.1	specified rate within the rate range for Lygus adults		
	lbs	that have migrated into cotton. Repeat application as		
		necessary to maintain control.*		
Fleahopper	0.25 lb	Apply when eggs or insects first appear. Repeat applica-	7	21
		tion as necessary to maintain control.*		

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**COTTON: FOLIAR CONT'D** 

By Ground: Minimum of 10.0 gallons of water per acre

PESTS CONTROLLED	RATES OF ACEPHATE 90 WSP/A	IISE INFORMATION	MINIMUM SPRAY INTERVAL (DAYS)	PHI
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.*		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
Bollworm Tobacco budworm (Adults, Larvae)	0.5 to 1.1 lbs (East of Rockies) 1.1 lbs (AZ & CA)	<b>Early Season:</b> Use 0.5 lb/A for light infestation. <b>Mid and Late Season:</b> 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.	7	21
Eggs/ DEADHATCH®	0.25 to 0.5 lb	<b>DEADHATCH:</b> Control of emerging larvae by consumption of treated egg casings.		
Stink bugs	0.8 lb	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**

**COTTON: FOLIAR** 

By Air: Minimum of 3.0 gallons water per acre (minimum of 5.0 gallons water per acre in AZ & CA)

	RATES OF		MINIMUM SPRAY	
PESTS CONTROLLED	ACEPHATE 90 WSP/A	USE INFORMATION	INTERVAL (DAYS)	PHI
Thrips (including Western	3.2 ozs	Apply when eggs or insects first appear. Repeat applica-	7	21
flower thrips)		tion as necessary to maintain control.*		
Plantbugs (Lygus)	0.25 to 0.83 lb	Apply when eggs or insects first appear. Use the higher	7	21
		specified rate within the rate range for Lygus adults		
	0.5 to 1.1 lbs	that have migrated into cotton. Repeat application as		
	(AZ & CA)	necessary to maintain control.*		
Fleahopper	0.25 lb	Apply when eggs or insects first appear. Repeat applica-	7	21
		tion as necessary to maintain control.*		
Cotton aphids (excluding	0.5 to 0.83 lb	This insect may develop resistance to various classes of	7	21
AZ & CA)		insecticides. Consult your local Agricultural Extension		
		Service for current control recommendations. Repeat		
		application as necessary to maintain control.*		
Whitefly (excluding Sweet	0.5 to 0.83 lb	Repeat application as necessary to maintain control.*	7	21
potato whitefly/Silverleaf				
whitefly)	0.5 to 1.1 lbs			
	(AZ & CA)			
Armyworms (excluding	0.83 lb	Apply when eggs appear and repeat at 7-day spray	7	21
Beet armyworm)		intervals.*		
Cabbage looper	0.5 to 1.1 lbs			
	(AZ & CA)		0	

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

# COTTON: FOLIAR CONT'D

By Air: Minimum of 3.0 gallons water per acre (minimum of 5.0 gallons water per acre in AZ & CA)

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

#### **USE RESTRICTIONS**

#### **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 gallons water per acre of spray

By Air: 3.0 to 10.0 gallons per acre of spray (minimum of 5.0 gallons water per acre in CA)

#### **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 pounds active ingredient per acre per crop cycle. This includes all methods of application.
- The maximum single aerial application rate for use in California and Arizona is 1.0 pound active ingredient per acre. For all remaining areas, the maximum single aerial application rate is 0.75 pound active ingredient per acre.

	<b>WSP AND TANK</b>	AMOUNT OF ACEPHATE 90 WSP + TANK MIX PARTNER/A	USE INFORMATION	MINIMUM SPRAY INTERVAL (DAYS)	
	Acephate 90 WSP		Follow all applicable directions, restri		21
(Silverleaf whitefly)	+ Danitol® 2.4 EC	+ 10.66 to 16.0 fl ozs	tions, and precautions on the EPA regi	3-	
	Spray		tered label for Danitol 2.4 EC Spray.		

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

#### COTTON TANK MIX: FOLIAR CONT'D

**By Ground:** Minimum of 10.0 gallons water per acre of spray

**By Air:** 3.0 to 10.0 gallons per acre of spray (minimum of 5.0 gallons water per acre in CA)

	ACEPHATE 90	AMOUNT OF ACEPHATE 90 WSP +			
	WSP AND TANK	TANK MIX PARTNER		MINIMUM SPRAY	
PESTS CONTROLLED	MIX PARTNER	/A	USE INFORMATION	INTERVAL (DAYS)	PHI
Armyworms (excluding	Acephate 90 WSP	0.28 to 1.1 lbs	Follow all applicable directions, restric-	7	21
Beet armyworm)		(ground)	tions and precautions on the EPA regis-		
Bollworm		or	tered label for Warhawk.		
Cabbage looper		0.28 to 0.83 lb (aerial)	Cutworms: Use of 0.8 lb/A Acephate 90		
Cotton aphid	+ Warhawk®	+ 1.0 to 2.0 pts	WSP.		
Cutworms			By Ground: Ground application is recom-		
Fleahopper			mended. Control is most effective when		
Grasshoppers			ground application is made in the eve-		
Pink bollworm			nings and sprays are directed toward the		
Plantbugs (Lygus,			base and lower portion of the plant.		
Mirids)			By Air: Aerial applications are less effec-		
Salt marsh caterpillar			tive, but may be used. Apply when insects		
Thrips (Including West-			first appear or when damage is first noted.		
ern flower thrips)					
Tobacco budworm					
Whitefly (Excluding					
Sweet potato/Silverleaf					
whitefly)					

#### 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.

# 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 pounds active ingredient per acre per 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 gallons water per acre of spray

By Air: 3.0 to 10.0 gallons per acre of spray (minimum 5.0 gallons water per acre in CA).

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

#### **USE RESTRICTIONS**

#### 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.

#### FIFI D CROPS

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

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Peppermint, Spearmint	Alfalfa looper Aphids Cutworm	1.11 lbs	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.  RESTRICTIONS  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.	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.  RESTRICTIONS  Do not feed treated forage or hay to livestock or allow animals to graze treated areas.  Do not apply more than 4.0 lbs AI (4.44 lbs product)/A/crop cycle.  This includes all methods of application.	7 (for application	14 (of digging)

Cont'd next page

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

# FIELD CROPS CONT'D

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	
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

# **TOBACCO**

# TOBACCO TRANSPLANT WATER APPLICATION

**USE RESTRICTIONS:** (Use Prohibited in CA)

		AMOUNT OF	
CROP	INSECTS	ACEPHATE 90 WSP/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS
Tobacco	Cutworms	0.83 lb	Provides control of early season flea beetles, green peach aphids, tobacco aphids,
	Flea beetle		and cutworms for approximately 3 to 4 weeks after transplanting. For later season
	Green peach aphid		control of these insects, apply a foliar spray of Acephate 90 WSP. Apply in a mini-
	Tobacco aphid		mum of 100 gals of water/A.
	Tobacco thrips		RESTRICTIONS
	·		Do not apply more than 0.83 lb Acephate 90 WSP/A as a transplant water applica-
			tion 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	PHI
Tobacco (Flue-Cured, Air	Grasshoppers	0.28 to 0.55 lb	Apply in 10.0 to 50.0 gals water/A with	3
Cured, Dark Fire Cured)	Flea beetle	0.55 lb	ground equipment or a minimum of 3.0	
,	Green peach aphid		gals/A by air. Apply spray at a minimum	
	Hornworm		of 7 days if necessary to maintain control.	
	Tobacco thrips		RESTRICTIONS	
	Stinkbugs	0.55 to 0.83 lb	Do not apply more than 4.0 lbs Al (4.44	
	Tobacco aphid		lbs product)/A/crop cycle. This includes	
	Vegetable weevils		all methods of application.	
	Budworm	0.83 lb		
	Cabbage looper			
	Cutworm			

# TOBACCO PLANT BED APPLICATION USE RESTRICTIONS

(Use Prohibited in CA)

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

# TOBACCO FLOATBED/GREENHOUSE APPLICATION USE RESTRICTIONS

(Use Prohibited in CA)

		AMOUNT OF	
CROP	INSECTS	<b>ACEPHATE 90 WSP/A</b>	FURTHER USE INSTRUCTIONS AND RESTRICTIONS
Tobacco	Cutworm	0.83 lb	Apply to foliage at the equivalent of 1.0 tbsp in 3.0 gals of water/every 1000
	Flea beetle		sq ft of bed. Apply evenly to ensure thorough coverage. Dispose of floatbed
	Green peach aphid		water in the transplanted field through the transplant water or through foliar
	Tobacco aphid		spray. Apply spray at a minimum of 7 days if necessary to maintain control.
			RESTRICTIONS
			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)	
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.  RESTRICTIONS  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 guestions 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)	PHI
string beans, snap beans, and wax beans.)	Cabbage looper Cutworms Green cloverworm Leafhoppers Mexican bean beetle Plantbugs (Lygus)	0.28 to 0.55 lb  0.55 to 1.11 lbs  0.83 to 1.11 lbs	Make the initial application when eggs or insects first appear using a minimum of 20.0 to 100 gals (ground) or 2.0 gals (aerial) of water/A. For severe insect infestations, use the higher listed rates.  USE RESTRICTIONS  Do not apply more than 2.0 lbs AI (2.22 lbs product)/A/crop cycle.  The feeding of treated vines to livestock is prohibited.  Use on succulent green beans is prohibited (includes string beans, snap beans, and wax beans).  Do not feed crop residues to livestock or allow animals to graze.  Do not apply to succulent beans grown for fresh market or processing. No portion of the succulent bean plant may be used or distributed for food or feed purposes. Seeds grown from succulent beans shall bear a tag 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 consumption or animal feed.	7	14 (dry beans) 1 (lima beans succulent forms)

# **VEGETABLE CROPS CONT'D**

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Brussels Sprouts, Cauliflower	Green peach aphid Cabbage looper Diamondback moth Imported cabbage- worm		Make initial application when eggs or insects first appear using a minimum of 25.0 to 150 gals (ground) or 5.0 gals (aerial) of water/A. Use the higher listed rate when heavy infestations of aphids are present.  USE RESTRICTIONS	3 (for application rates of 0.55 lb/A or less) 7 (for application rates greater than	14
			Do not apply more than 2.0 lbs AI (2.22 lbs product)/A/crop cycle. The feeding of treated trimmings or the grazing of livestock in treated areas is prohibited.	0.55 lb/A)	
Celery	Green peach aphid Beet & Fall army- worm Cabbage looper	0.55 to 1.11 lbs 1.11 lbs	Make the initial application when eggs or insects first appear using a minimum of 50.0 to 100 gals (ground) or 5.0 gals (aerial) of water/A.	3 (for application rates of 0.55 lb/A or less)	21
			USE RESTRICTIONS All celery must be trimmed (tops removed before shipment). The use of treated tops for food/feed is prohibited. Do not apply more than 2.0 lbs Al (2.22 lbs product)/A/crop cycle.	7 (for application rates greater than 0.55 lb/A)	
Head Lettuce (Crisphead Type Only)	Aster leafhopper Green peach aphid Armyworm (exclud- ing Beet armyworm) Cabbage looper	0.55 to 1.11 lbs 1.11 lbs	Apply using a minimum of 10.0 to 60.0 gals (ground) or 5.0 gals (aerial) of water/A. Applications may be made in spring, summer, and early fall in all areas; winter applications may be made in AZ, CA, FL, and TX; and late fall applications may be made in AZ. In the desert areas of AZ and CA, do not apply after the 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 AI (2.22 lbs product/A/crop cycle.	3 (for application rates of 0.55 lb/A or less) 7 (for application rates greater than 0.55 lb/A)	21
Peppers (non Bell type)	Aphids	0.55 lb	Apply using a minimum of 40.0 to 150 gals of water/A. <b>USE RESTRICTIONS</b> 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 AI (1.11 lbs product)/A/crop cycle.	7	7
Peppers (Bell type)	Grasshoppers Cabbage looper Green peach aphid Tobacco hornworm		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. USE RESTRICTIONS Do not apply more than 2.0 lbs AI (2.22 lbs product)/A/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)	PHI
Citrus (Non-bearing)	Aphids Grasshoppers Katydid Mealybugs Orangedogs Plantbugs Thrips Whiteflies (except Sweet Potato/Silver- leaf)	0.55 lb	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
	Ants (excluding Fire, Harvester, Carpenter and Pharaoh)	0.83 lb	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.  USE RESTRICTIONS 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.		

# **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
•	Grasshoppers	0.28 lb	Apply using a minimum of 10.0 gals (ground), 1.0 gal (aerial), or 5.0 gals
(Field Borders,			(aerial in CA) of water/A.
Fencerows, Road-			USE RESTRICTIONS
sides, Ditch-banks			The grazing or feeding of vegetation cut from treated areas is prohibited.
and Borrow Pits)			

# **NON-CROP AREAS (WASTELAND)**

APPLICATION Method	INSECTS	AMOUNT OF ACEPHATE 90 WSP/A	FURTHER USE INFORMATION AND RESTRICTIONS
Foliar Ground/Aerial	Black grass bugs Grasshoppers Mormon crickets	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.  USE RESTRICTIONS
			The grazing or feeding of vegetation cut from treated areas is prohibited. Do not make more than 1 application/season.

# **CONTAINER GROWN NURSERY STOCK**

		AMOUNT OF ACEPHATE 90		
PLANTS	INSECTS	WSP/A	TIME OF APPLICATION	APPLICATION DIRECTIONS
Container Grown Nursery Stock (Arbor- vitae, Azalea, Camellia,	Black vine weevil Strawberry root weevil	0.83 lb	lation should be made by mid-September for greenhouse stock and by mid-October for out-door stock. Consult your local county extension agent for information on the identification and	system. Do not apply more
Rhododendron, Roses, Vibur- num, Yew)	Ants (excluding Fire, Harvester, Carpenter and Pharaoh)		Control of root weevils on ornamentals.  Apply as needed to control the pest.	than 0.83 lb/A.

# **ORNAMENTAL TREES & SHRUBS**

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.

PLANTS	INSECTS	AMOUNT OF ACEPHATE 90 WSP/100 GALS	TIME OF APPLICATION	MINIMUM SPRAY INTERVAL (DAYS)	APPLICATION DIRECTIONS AND RESTRICTIONS
Trees and Shrubs (except Flowering Crabapple, see below)	Aphids		As the insects or damage first appear.	3 (for application rates of 0.55 lb/A or less)	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.	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. Application to Huckleberry, Balm of Gilead,
	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. Farm Advisor or County Extension Agent.		Cottonwood, Lombardy Poplar and <i>Viburnum suspensum</i> may result in phytotoxicity. Nursery crops - Before treating large plantings, spray only a few plants and observe two weeks for phytotoxicity.
	Ponderosa pine needle miner	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
	Grasshoppers	0.55 to 1.11 lbs (8.7 to 17.7 ozs)	As the grasshoppers begin to appear.		a full coverage spray.
	California oakworm Cankerworms (Spring & Fall)	(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.		Cont'd nevt page

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ORNAMENTAL T	ORNAMENTAL TREES & SHRUBS CONT'D				
PLANTS	INSECTS	AMOUNT OF ACEPHATE 90 WSP/100 GALS	TIME OF APPLICATION	MINIMUM SPRAY INTERVAL (DAYS)	APPLICATION DIRECTIONS AND RESTRICTIONS
Trees and Shrubs (except Flowering Crabapple, see below)		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.	rates of 0.55 lb/A or less) 7 (for application	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.	rates greater than 0.55 lb/A)	
	Japanese Beetle	1.11 lbs (17.7 ozs)	As the Japanese Beetles begin to appear. Repeat applications, at 2-week intervals, may be necessary.		
	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.		
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.		Apply a minimum of 2 weeks prior to bud burst using a minimum of 100 (ground) or 2.0 (aerial) gals of water/A. USE RESTRICTIONS 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.  Note: Phytotoxicity has occurred on the following Crabapple varieties: Hopa, Ichonoski, Malusfloribunda, Pink Perfection, Red Wine and Snow Cloud.  USE RESTRICTIONS  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.

# **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 pounds active ingredient per acre per year.

		ACEPHATE	, , , , , , , , , , , , , , , , , , ,	
		90 WSP/1000		
<b>PLANTS</b>		SQ FT	TIME OF APPLICATION	APPLICATION DIRECTIONS
Golf Course Turf	Fall armyworm Southern armyworm Yellow striped armyworm	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.
	Cutworm	1.0 to 1.6 ozs (2.71 to 4.44 lbs/A)		
	Chinch bugs	(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.)	(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 flozs/50.0 gals of water for a large total mix volume.  USE RESTRICTIONS:  Do not irrigate after application.
	Grasshoppers Greenbug ( <i>Schizaphis</i> <i>graminun</i> )	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.
Dichondra (Golf Course Turf)	Cutworm Flea beetle Southern armyworm Yellow striped armyworm	(2.2 to 4.44	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		AMOUNT ACEPHATE 90 WSP/GAL	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)		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.
- 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.

DIANTO	PESTS	ACEPHATE 90 WSP APPLI- CATION RATE/		ADDITION DIDECTIONS
PLANTS Chrysanthemums 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.	APPLICATION DIRECTIONS  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 gibbum Maranta leuconeura kerchoveana Polystichum
Cissus antarctica Pachystachya lutea Pteris ensiformis
Ficus triangularis Plectranthus australis Tolmiea menziesii
Fittonia verschaffelti Polypodium aureus

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 Gem Statesman
Bonnie Jean Iceberg Tally Ho
Dixie Pride Westward Ho
Garland Showoff 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 pounds of active ingredient per 100 gallons water as a single application to crops grown for cut flower production and 1.0 pound of active ingredient per 100 gallons for all other greenhouse and outdoor ornamental plants.

	PESTS	AMOUNT ACEPHATE 90 WSP/100		
PLANTS	CONTROLLED		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	Aphids	0.28 lb (4.3 ozs)	As aphids begin to appear.	Apply the specified amount of Acephate 90 WSP in 100 gals with a hydraulic
Foliage Plants Orchids Poinsettia	Mealybugs Thrips Whiteflies	0.55 lb (8.7 ozs)	As insects begin to appear. To maintain control of mealybugs and whiteflies, repeat applications at a minimum of 14-day spray intervals.	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)	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 10.66 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 Chrysanthemums 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 this product in its tightly closed original container. Store in a cool, dry (preferably locked) area that is away from excessive heat, and in a place that is inaccessible to children and animals. 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 empty bag for recycling if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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

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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.

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