

# ACEPHATE 90 WDG

#### INSECTICIDE

ACTIVE INGREDIENT:
Acephate (*O,S*-Dimethyl acetylphosphoramidothioate) 90.00%
OTHER INGREDIENTS: 100.00%
TOTAL 100.00%

# CAUTION CAUTION

[For reviewer: the following statement will appear on the label booklet attached to the container}
For Additional Precautionary Statements, Complete First Aid, Directions for Use, Storage and Disposal and Other Use Information, See Inside This Label Booklet.

	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 by the poison control center or doctor.</li> </ul>					
	Do not give anything 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>					
	Call a poison control center or doctor for treatment advice.					
If on skin	skin • Take off contaminated clothing.					
or clothing:	ing: • Rinse skin immediately with plenty of water for 15 to 20 minutes.					
	Call a poison control center or doctor for treatment advice.					
If inhaled:	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.					

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

**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.

EPA REG. NO. 34704-1051

EPA EST. NO. 069845-CHN-002

NET WEIGHT 20 LB (9.07 KG)

011917 V1D 02Y17

# 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 particulate respirator with any N, R or P filter, NISOH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.

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**

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.

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 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.

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 WDG is a dispersible granule used as an insecticide for control of pests on selected agricultural crops and in listed non-crop areas. The active ingredient in Acephate 90 WDG is absorbed by plants via the roots and foliage to provide systemic control of feeding insects. Insect pests are generally controlled more effectively by Acephate 90 WDG through ingestion than by contact.

Because it is impossible to test this product for every combination of cultivar, soil and horticultural practice, it is the responsibility of the user to ensure that Acephate 90 WDG is compatible with the variety or cultivar of the ornamental crop to which you are making an application under your specific conditions. Test the product on a limited scale and observe for phytotoxicity over a two-week period prior to making large-scale applications.

Make repeat applications of Acephate 90 WDG to maintain control only as directed.

#### RESTRICTIONS

- Acephate 90 WDG is NOT for indoor residential use.
- 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.
- Turf uses are restricted to ground applications to golf courses only.

#### TANK MIXES

- When tank mixing Acephate 90 WDG with other products, read the entire label of each product being added to the mix and follow the most restrictive guidelines applicable to your situation.
- The user, applicator and/or application advisor accepts full responsibility for using this product with any other product or application method not expressly authorized by this label.

#### CHEMIGATION RESTRICTIONS

- Only cranberries can have this product applied by chemigation (sprinkler irrigation) system.
- Do not apply to cranberries using any other type of irrigation system.

#### HAND WAND RESTRICTIONS

- Do not make applications by low-pressure hand wand in California.
- Agricultural Uses Low-pressure hand wand equipment may only be used for mound treatment to control fire ants.
- Non-Agricultural Uses Low-pressure hand wand equipment may only be used for mound treatment to control fire ants and on ornamental trees, shrubs and floral plants only when grown for non-agricultural or non-commercial use.
- Low-pressure hand wand equipment may not be used for perimeter control or wasp treatments.

#### SPRAY DRIFT MANAGEMENT

Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy and when wind speed is 10 mph or less at the application site as measured by an anemometer. Use fine or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

For airblast applications, direct spray above foliage and turn off outward pointing nozzles at row ends and outer rows. Apply only when wind speed is 3 to 10 mph at the application site as measured by an anemometer outside of the treated area on the upwind side.

For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3 to 10 mph as measured by an anemometer. Use fine or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

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

The applicator also must use all other measures necessary to control drift.

#### COTTON

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

#### RESTRICTIONS:

- 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

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

**COTTON: FOLIAR** 

By Ground: Minimum of 10.0 to 25.0 gallons of water per acre.

PESTS CONTROLLED	RATES OF ACEPHATE 90 WDG/A	REMARKS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Thrips (including Western flower thrips)	3.2 oz	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 lb	Apply when eggs or insects first appear. Use higher rate 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 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.*	7	21
Whitefly (excluding Sweet potato whitefly/ Silverleaf whitefly)	0.5 to 1.1 lb	Repeat application as necessary to maintain control.*	7	21
Armyworms (excluding Beet armyworm) Cabbage looper	1.1 lb	Apply when eggs appear and repeat applications using 7-day spray intervals.*	7	21
Bollworm Tobacco budworm (Adults, Larvae)	0.5 to 1.1 lb (East of Rockies) 1.1 lb (AZ & CA)	Early Season: Use 0.5 lb/A for light infestation.  Mid and Late Season: Use 0.8 to 1.1 lb/A for moderate to severe infestations.  Apply when eggs appear and repeat at 7-day spray intervals. Moths of budworm	7	21
Eggs/ DEADHATCH®	0.25 to 0.5 lb	Jarvae 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	0.8 lb	Apply when eggs appear and repeat applications using 7-day spray intervals.*	7	21
Pink bollworm (AZ & CA)	1.1 lb	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

#### RESTRICTIONS

<sup>\*</sup> Not to exceed a maximum of 4.0 pounds active ingredient per acre per crop cycle. This includes all methods of application.

**COTTON: FOLIAR** 

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

PESTS CONTROLLED	RATES OF ACEPHATE 90 WDG	REMARKS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Thrips (including Western flower thrips)	3.2 oz	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 lb (AZ & CA)	Apply when eggs or insects first appear. Use higher rate 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.*	7	21
Whitefly (excluding Sweet potato whitefly/ Silverleaf whitefly)	0.5 to 0.83 lb 0.5 to 1.1 lb (AZ & CA)	Repeat application as necessary to maintain control.*	7	21
Armyworms (excluding Beet armyworm) Cabbage looper	0.83 lb 0.5 to 1.1 lb (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 lb (AZ & CA)	Early Season: Use 0.5 lb/A for light infestation.  Mid and Late Season: Use 0.8 to 1.1 lb/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.  DEADHATCH: 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 lb	Apply when insects appear and repeat at 7-day spray intervals.*	7	21
Cutworms	0.8 lb 0.8 to 1.1 lb (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

### RESTRICTIONS

<sup>\*</sup>Not to exceed a maximum of 4.0 pounds active ingredient per acre per crop cycle. This includes all methods of application.

#### **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 to 25.0 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)

#### 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.

PESTS Controlled	ACEPHATE 90 WDG AND TANK MIX PARTNER	AMOUNT OF ACEPHATE 90 WDG + TANK MIX PARTNER/A	REMARKS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Sweet potato whitefly (Silverleaf whitefly)	Acephate 90 WDG + Danitol® 2.4 EC Spray	0.5 lb + 10-2/3 to 16.0 fl oz	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) Saltmarsh caterpillar Thrips (Including Western flower thrips) Tobacco budworm Whitefly (Excluding Sweet potato/ Silverleaf whitefly)	+ Warhawk® or Warhawk Clearform®	0.28 to 1.1 lb (ground) or 0.28 to 0.83 lb (aerial) + 1.0 to 2.0 pt	Follow all applicable directions, restrictions and precautions on the EPA registered label for Warhawk or Warkhawk Clearform. Acephate 90 WDG Cutworms: Use of 0.8 lb/A By Ground: 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. By Air: 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 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 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 WDG 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 to 25.0 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).

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

#### 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.

<sup>\*</sup>Do not apply more than a maximum of 4.0 pounds active ingredient per acre per season. This includes all methods of application.

#### **COMMERCIALLY TREATED COTTONSEED**

#### APPLICATION INSTRUCTIONS

This product is intended for the applicator to use treated seed for planting on the farm, package and store treated seed for later use, or package treated seed for later commercial sale.

Acephate 90 WDG contains a water-soluble systemic insecticide which helps to reduce cotton injury to cotton seedlings by several listed insects.

Acephate 90 WDG can be mixed in the slurry tank with most of the fungicide seed treatments in common use. It also can be applied as a separate treatment using enough water to give adequate coverage of the seed. Acephate 90 WDG dissolves quickly in water with a minimum of agitation.

When using formulations that do not contain dye, compliance with 21 CFR Chapter 1, Section 2.5 requires that all seed treated with a pesticide must be colored to distinguish from, and prevent inadvertent use as, food for man or feed for animals.

Treated seeds must not be used for, or mixed with food for animal feed, or processed for oil. Seeds treated with Acephate 90 WDG may be considered adulterated under state and federal laws if sold or shipped as food or feedstuffs. Seeds commercially treated with Acephate 90 WDG must be labeled as follows: "TREATED SEED: DO NOT USE FOR FOOD, FEED OR OIL."

Take all precautions and limitations on labeling of all products used in mixtures.

PESTS CONTROLLED	AMOUNT OF ACEPHATE 90 WDG PER 100 LBS COTTON SEED	EFFICACY
Cotton Aphids	0.30-0.44 lb	Gives effective reduction of thrips and cotton
Thrips (including Western Flower Thrips)	(4.8-7.1 oz)	aphids for up to 3 weeks after planting.
Black (Greasy)	0.30-0.44 lb	Gives effective reduction of Black (Greasy)
Cutworm	(4.8-7.1 oz)	Cutworm from planting through the 3rd to 4th
		leaf stage of development.
		When planting into fields where large cutworms
		are present (5th instar and larger), economic
		damage may occur.

#### RESTRICTIONS:

Do not apply more than 4.0 lbs. a.i./A (4.4 lbs./A of Acephate 90 WDG) per crop cycle. This includes all uses of acephate in commercial seed treatment, in-furrow spray, and foliar applications.

Do not use treated seed for food, feed, or oil production. Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.

Store away from feeds and other foodstuffs.

Wear long-sleeved shirt, long pants, and chemical-resistant gloves when handling treated seed.

Dispose of seed packaging in accordance with local requirements.

Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water. Cover or incorporate spilled treated seeds.

Treated seeds must be planted into the soil at the depth of 1 inch or greater.

Follow all precautions and limitations on labeling of all products used in mixtures.

#### **Seed Container Label Requirements**

Seed commercially treated with Acephate 90 WDG must be labeled in compliance with all the requirements of the Federal Seed Act. In addition, all bags containing treated seed must be labeled or tagged with the following information:

- This seed has been treated with Acephate 90 WDG, which contains x mg\* active ingredient (ai) per seed.
   \*to be filled in
- Do not apply more than 4.0 lbs. a.i./A per crop cycle. This includes all uses of acephate such as commercial seed treatments, in-furrow spray, and foliar applications.
- Do not use treated seed for food, feed, or oil production. Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.
- Store away from feeds and other foodstuffs.
- Wear long-sleeved shirt, long pants, and chemical-resistant gloves when handling treated seed.
- Dispose of seed packaging in accordance with local requirements.
- Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water. Cover or incorporate spilled treated seeds.
- Treated seeds must be planted into the soil at the depth of 1 inch or greater.

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

CDOD	INCLOTO	AMOUNT OF	FURTHER USE INSTRUCTIONS	MINIMUM SPRAY	DUI
CROP Peppermint, Spearmint	Alfalfa looper Aphids Cutworm	1.11 lb	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) gal of water/A.  RESTRICTIONS  The grazing of animals on treated areas, and the feeding of spent mint hay to animals are prohibited. Do not apply more than 2.0 lb AI (2.22 lb product)/A/season.  Maximum of 2 applications/crop season.	7 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 lb	Apply in water at 10.0 to 50.0 gal spray/A by ground or in 5.0 to 10.0 gal 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 lb Al (4.44 lb product)/A/crop cycle. This includes all methods of application.	7	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 lb  0.83 to 1.1 lb	By Air: 5.0 to 10.0 gal/A of spray By Ground: 10.0 to 50.0 gal/A of spray RESTRICTIONS Do not graze or cut vines for hay or forage. Do not apply more than 1.5 lb Al/A (1.6 lb of Acephate 90 WDG)/season.	7	14

#### **TOBACCO**

**TOBACCO TRANSPLANT WATER APPLICATION** 

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

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WDG/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 WDG.  Apply in a minimum of 100 gal of water/A.  RESTRICTIONS  Do not apply more than 0.83 lb Acephate 90 WDG/A as a transplant water application as some phytotoxicity may occur.  Do not apply more than 4.0 lb AI (4.44 lb product)/A/crop cycle. This includes all methods of application.
		1.25 lb	RESTRICTIONS Use limited to TN. Do not apply more than 4.0 lb Al (4.44 lb product)/A/crop cycle. This includes all methods of application. Apply using a minimum of 200 gal of water/A.

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

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

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

CROP	INSECTS	AMOUNT ACEPHATE 90 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	PHI
Tobacco (Flue-Cured,	Grasshoppers Flea beetle	0.28 to 0.83 lb 0.55 to 0.83 lb	Apply in 10.0 to 50.0 gal water/A with ground equipment or a minimum of 3.0 gal/A by air.	3
Air Cured, Dark Fire Cured)	Green peach aphid	0.00 to 0.00 to	Apply spray at a minimum of 7 days if necessary to maintain control.	
	Hornworm Tobacco thrips		RESTRICTIONS  Do not apply more than 4.0 lb Al (4.44 lb product)/A/crop	
	Stinkbugs Tobacco aphid	0.55 to 0.83 lb	cycle. This includes all methods of application.	
	Vegetable weevils Budworm	0.83 lb		
	Cabbage looper Cutworm			

### TOBACCO PLANT BED APPLICATION RESTRICTIONS: (Use Prohibited in CA)

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

## TOBACCO FLOATBED/GREENHOUSE APPLICATION RESTRICTIONS: (Use Prohibited in CA)

CROP	INSECTS	AMOUNT ACEPHATE 90 WDG	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 gal 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.  RESTRICTIONS  Do not apply more than 4.0 lb Al (4.44 lb product)/A/season. This includes all methods of application.

#### FRUIT CROP

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY	рш
Cranberries	Cranberry	1.11 lb	Apply using sufficient water to	INTERVAL (DAYS) N/A	90
Giannennes	blossom worm	1.1110	achieve thorough coverage	IV/A	90
			(ground) or in a minimum of		
	False armyworm Fireworms				
			2.0 gal of water/A (aerial).		
	Gypsy moth		Apply in water by air, ground or		
	Spanworms		with sprinklers.		
	Sparganothis		RESTRICTIONS		
			When applied via irrigation system,		
			only sprinkler type irrigation		
			equipment can be used.		
			Maximum of 1 application		
			/growing season.		
			Do not apply from start of bloom		
			until all berries have set.		
			Do not apply more than 1.0 lb Al		
			(1.11 lb product)/A/crop cycle.		
			This includes all methods of		
			application.		
		1.11 lb	Apply using sufficient water to	N/A	75
			achieve thorough coverage		
			(ground) or in a minimum of 2.0		
			gal of water/A (aerial).		
			RESTRICTIONS		
			Use limited to MA, NJ, WA, and WI		
			Do not apply from start of bloom		
			until all berries have set; only 1		
			application may be applied		
			post-bloom.		
			Do not apply more than 1.0 lb Al		
			(1.11 lb product)/A/crop cycle.		
			This includes all methods of		
			application.		
			Limit to 1 application/growing		
			season.		
			When applied via irrigation system,		
			only sprinkler type of irrigation		
			may be used.		

#### 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.

#### 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** (includes succulent green beans grown for seed only)

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

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	
Beans & Lima Beans (Dry &	Fleahoppers Grasshoppers	0.28 to 0.55 lb	Make the initial application when eggs or insects first appear using	7	14 (dry beans)
Succulent) excluding succulent green beans	Aphids Beanleaf beetle Bean leafroller Cabbage looper Cutworms Green cloverworm	0.55 to 1.11 lb	a minimum of 20.0 to 100 gal (ground) or 2.0 gal (aerial) of water/A. For severe insect infestations, use the higher listed rates. <b>RESTRICTIONS</b> Do not apply more than 2.0 lb Al		1 (lima beans succulent forms)

### **VEGETABLE CROPS (includes succulent green beans grown for seed only)** *cont'd.* PHI (pre-harvest interval) denotes number of days to harvest.

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
	Leafhoppers		(2.22 lb product)/A/crop cycle.		
	Mexican bean		The feeding of treated vines to		
	beetle		livestock is prohibited.		
	Plantbugs		Use on succulent green beans as		
	(Lygus)		a food crop is prohibited (includes		
	Soybean looper		string beans, snap beans, and		
	Thrips		wax beans).		
	Whitefly		RESTRICTIONS FOR SUCCULENT		
		0.83 to 1.11 lb			
	Armyworms	0.83 10 1.11 10	GREEN BEANS GROWN FOR SEED		
	Corn earworm		Do not feed crop residues to live-		
	European		stock or allow animals to graze		
	cornborer		treated areas. 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.		
russels	Green peach	0.55 to 1.11 lb	Make initial application when eggs	7	14
Sprouts,	aphid		or insects first appear using a		
Cauliflower	Cabbage looper	1.11 lb	minimum of 25.0 to 150 gal		
	Diamondback		(ground) or 5.0 gal (aerial) of		
	moth		water/A.		
	Imported		Use the higher listed rate when		
	cabbageworm		heavy infestations of aphids are		
	Cabbayeworiii				
			present.		
			RESTRICTIONS		
			Do not apply more than 2.0 lb Al		
			(2.22 lb product)/A/crop cycle.		
			The feeding of treated trimmings		
			or the grazing of livestock in		
			treated areas is prohibited.		
elery	Green peach	0.55 to 1.11 lb	Make the initial application when	7	21
	aphid		eggs or insects first appear using	·	
	Beet & Fall	1.11 lb	a minimum of 50.0 to 100 gal	7	21
	armyworm		(ground) or 5.0 gal (aerial) of	,	
	Cabbage looper		water/A.		
	Januaye 100pel		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 lb Al		
			(2.22 lb product)/A/crop cycle.		
lead Lettuce	Aster leafhopper	0.55 to 1.11 lb	Apply using a minimum of 10.0 to	7	21
		0.55 10 1.11 10		ı	<u></u>
(Crisphead Type Only)	Green peach aphid		60.0 gal (ground) or 5.0 gal (aerial) of water/A.		
	I ODDIO	I .	LIGORIALL OF WATOR/A		1

## **VEGETABLE CROPS (includes succulent green beans grown for seed only)** *cont'd.* PHI (pre-harvest interval) denotes number of days to harvest.

CROP	INSECTS	AMOUNT OF ACEPHATE 90 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	РНІ
01101	Armyworm	1.11 lb	Applications may be made in	INTERIORE (DATO)	
	(excluding		spring, summer, and early fall in		
	Beet armyworm)		all areas; winter applications may		
	Cabbage looper		be made in AZ, CA, FL, and TX;		
			and late fall applications may be		
			made in AZ.		
			RESTRICTIONS		
			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.		
			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 lb Al		
D	A . I. '. I.	0.55.11	(2.22 lb product)/A/crop cycle.	7	7
Peppers	Aphids	0.55 lb	Apply using a minimum of 40.0 to	7	7
(non Bell type)			150 gal of water/A. RESTRICTIONS		
			Use limited to Midwestern and Eastern states and to PR.		
			Maximum of 2 applications/crop		
			season.		
			Do not apply more than 1.0 lb Al		
			(1.11 lb product)/A/crop cycle.		
Peppers	Grasshoppers	0.28 to 1.11 lb	Make the initial application when	7	7
(Bell type)	Cabbage looper	0.55 to 1.11 lb	eggs or insects first appear using	<b>'</b>	ļ <i>.</i>
(======================================	Green peach	10 10 11 10	a minimum of 25.0 to 150 gal		
	aphid		(ground), 3.0 gal (aerial), or 5.0		
	Tobacco		gal (aerial in CA) of water/A.		
	hornworm		RESTRICTIONS		
	European	0.83 to 1.11 lb	Do not apply more than 2.0 lb Al		
	cornborer		(2.22 lb product)/A/crop cycle.		

#### **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 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS	MINIMUM SPRAY INTERVAL (DAYS)	PHI
Citrus	Aphids	1.11 lb	Make initial spray application to	7	N/A
(Non-bearing)	Grasshoppers		individual juvenile or non-bearing		
	Katydid		trees when eggs or insects first		
	Mealybugs		appear using a minimum of 100 to		
	Orangedogs		200 gal of water/A by ground		
	Plantbugs		equipment.		
	Thrips				
	Whiteflies (except				
	Sweet Potato/				
	Silverleaf)				
	Ants (excluding	4.44 lb	Make initial spray application to		
	Fire, Harvester,		individual juvenile or non-bearing		
	Carpenter		trees using a minimum of 100 to		
	and Pharaoh)		200 gal of water/A by ground		
			equipment.		
			RESTRICTIONS		
			Use limited to FL.		
		Mound Treatment	Apply 1.0 gal of the finished spray	N/A	
			to each mound area by sprinkling		
		Ground	the mound until it is wet and treat		
			a 4 ft diameter circle around the		
		0.67 oz in 5.0 gal water	mound.		
	Citrus Blackfly	0.5 to 0.83 lb	Apply when eggs or insects first		
	(not registered		appear. Use the high rate when a		
	for use in CA)		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.

CDOD	INCLOTO	AMOUNT OF	FURTHER HEE INSTRUCTIONS AND DESTRICTIONS
CROP Non-Crop Areas (Field Borders, Fencerows, Roadsides, Ditch-banks and Borrow Pits)	Grasshoppers	O.28 lb	Apply using a minimum of 10.0 to 20.0 gal (ground), 1.0 gal (aerial), or 5.0 gal (aerial in CA) of water/A.  RESTRICTIONS  The grazing or feeding of vegetation cut from treated areas is prohibited.
Non-Crop Areas	Ants (excluding Fire, Harvester, Carpenter and Pharaoh)	Mound Treatment- Dry Method: Evenly distribute 1.0 to 2.0 tsp over the mound. Drench Method: Mix 0.67 oz in 5.0 gal of water. Apply 1.0 gal of mix to each mound	For best results apply the material in the early morning or late afternoon when the ants are most active.  Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest.  Grass in treated area may be injured.  RESTRICTIONS  Do not use on turf.  The grazing or feeding of vegetation cut from treated areas

#### SPECIALTY USES cont'd.

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 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS
		area by sprinkling the mound until it is wet and treat a 4 ft diameter circle around the mound.	is prohibited. Do not treat mound more than once/season. Maximum of 2.0 tsp product/mound (dry method)/season.

#### NON-CROP AREAS (WASTELAND)

		AMOUNT OF	
CROP	INSECTS	ACEPHATE 90 WDG/A	FURTHER USE INSTRUCTIONS AND RESTRICTIONS
Foliar	Black grass	1.6 to 2.2 oz	Apply using a minimum of 10.0 to 20.0 gal (ground), 1.0 to 5.0
Ground/Aerial	bugs		gal (aerial), or 5.0 gal (aerial in CA) of water/A.
	Grasshoppers		RESTRICTIONS
	Mormon		The grazing or feeding of vegetation cut from treated areas
	crickets		is prohibited.
Mound	Ants (excluding	Mix 0.67 oz in 5.0 gal	RESTRICTIONS
Treatment	Fire, Harvester,		The grazing or feeding of vegetation cut from treated areas
Ground	Carpenter and	mix to each mound area	is prohibited.
	Pharaoh)	by sprinkling the mound	Only 1 application/season.
		until it is wet and treat a	
		4 ft diameter circle	
		around this mound.	
		Seasonal Rate: Maximum	
		application-13 mounds/A.	· ·

### **CONTAINER GROWN NURSERY STOCK**

PLANTS	INSECTS	AMOUNT OF ACEPHATE 90 WDG	TIME OF APPLICATION	APPLICATION DIRECTONS
Container Grown Nursery Stock (Arborvitae, Azalea, Camellia, Rhododendron, Roses, Viburnum, Yew)	Black vine weevil Strawberry root weevil	0.63 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.	Apply the specified amount of Acephate 90 WDG/100 gal of solution so as to thoroughly drench the root system.
,	Ants (excluding Fire, Harvester, Carpenter and Pharaoh)	0.63 lb	Apply as needed to control the pest.	

#### **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 ACEPHATE 90 WDG/100 GAL	TIME OF APPLICATION	MINIMUM SPRAY INTERVAL (DAYS)	APPLICATION DIRECTIONS AND RESTRICTIONS
Trees and Shrubs (except	Aphids Bagworms Birch leafminer	0.28 to 1.1 lb (4.4 to 17.7 oz)	As the insects or damage first appear.	14	Apply the specified amount of Acephate 90 WDG in 100 gal water with a hydraulic

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

PLANTS	INSECTS	AMOUNT ACEPHATE 90 WDG/100 GAL	TIME OF APPLICATION	MINIMUM SPRAY INTERVAL (DAYS)	
Flowering Crabapple, see below) cont'd.	Tent caterpillar* Lace bugs Leafrollers	0.28 to 1.1 lb (4.4 to 17.7 oz)	As the insects or damage first appear.	suitable stic control of G	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 lb (8.7 to 17.7 oz)	As insects begin to appear.		*Mist blower application. Adjust rates to 1.11 lb/100 gal water for Gypsy moth control and 0.83 lb/100 gal water for Tent caterpillar control.
	Scales (Crawlers)	0.55 to 1.11 lb (8.7 to 17.7 oz)	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 Viburnum suspensum may result in phytotoxicity.  Nursery crops - Before treating large plantings, spray only a few plants and observe 2 weeks for phytotoxicity.
	Ponderosa pine needle miner	0.55 to 1.11 lb (8.7 to 17.7 oz)	Time of application is important. Consult your Farm Advisor or County Extension Agent.		Apply the specified amount of Acephate 90 WDG in 100 gal water with a hydraulic sprayer as a full coverage
	Grasshoppers	0.55 to 1.11 lb (8.7 to 17.7 oz)	As the grasshoppers begin to appear.		spray.
	California oakworm Cankerworms (Spring & Fall) Nantucket pine tip moth larvae	0.28 to 1.1 lb (4.4 to 17.7 oz)	As the insects begin to appear. Use the higher amount when the larger larvae are present.  Time of application is important. Consult your Farm Advisor or County Extension Agent. Repeat applications will be required for subsequent generations.		Apply the specified amount of Acephate 90 WDG in 100 gal water with a hydraulic sprayer.
	Root weevil adults	1.11 lb (17.7 oz)	Apply when first feeding damage occurs. Repeat applications at 4-week intervals until the first heavy frost, may be necessary for complete foliage protection.		Apply the specified amount of Acephate 90 WDG in 100 gal water with a hydraulic sprayer as a full coverage spray.
	Box elder bugs Budworms Leafhoppers Sawflies	1.11 lb (17.7 oz)	As the insects begin to appear.		
	Japanese Beetle	1.11 lb (17.7 oz)	As the Japanese Beetles begin to appear. Repeat applications at 2-week intervals may be necessary.		
	Elm leaf beetle larvae	1.11 lb (17.7 oz)	As the larvae begin to appear. Acephate 90 WDG will not prevent Elm leaf beetle eggs from hatching.		

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

PLANTS Douglas Fir, Christmas Trees	INSECTS  Douglas fir needle midge	AMOUNT ACEPHATE 90 WDG/100 GAL 0.55 lb (8.7 oz)	TIME OF APPLICATION  Make application no more than 2 weeks prior to bud burst. For additional pest management information, consult your county extension service.	MINIMUM SPRAY INTERVAL (DAYS)  3 days for rates up to and including 0.5 lb AI/A and 7 days for rates over 0.5 lb AI/A.	APPLICATION DIRECTIONS AND RESTRICTIONS Apply a minimum of 2 weeks prior to bud burst using a minimum of 100 (ground) or 2.0 (aerial) gal of water/A. 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 oz)	As the insects begin to appear.	28	Apply the specified amount of Acephate 90 WDG 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.  RESTRICTIONS  Do not apply more often than 3 times in a growing season.
Crepe Myrtle	Aphids	3.0 to 4.0 level tblsp (0.7 to 1.0 oz)/1.0 tblsp 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 WDG. 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.

PLANTS	INSECTS	ACEPHATE 90 WDG/1000 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 lb/A)	As the insects appear. A repeat application at 2-week intervals may be necessary.	Apply the specified amount of Acephate 90 WDG/1000 sq ft. Use a minimum of 5.0 gal water/1000 sq ft to obtain good coverage.
	Cutworm	1.0 to 1.6 oz (2.71 to 4.44 lb/A)	•	
	Chinch bugs	1.0 to 1.6 oz (2.71 to 4.44 lb/A)	Apply as needed for adult population knockdown. Repeat application at 10 to 14 days if needed.	Apply the specified amount of Acephate 90 WDG/1000 sq ft. Use 1.0 to 15.0 gal 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 lb/A)	As sod webworms begin to appear. Use the higher amount 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 WDG/1000 sq ft. Use 1.0 to 15.0 gal water/1000 sq ft to obtain good coverage.
	Leafhopper	0.8 oz (2.22 lb/A)	As the leafhoppers begin to appear. A repeat application at 7-day intervals may be necessary.	Apply the specified amount of Acephate 90 WDG/1000 sq ft. Use 1.0 to 15.0 gal water/1000 sq ft to obtain good coverage.
	Mole crickets (except CA)	0.8 to 1.6 oz (2.22 to 4.44 lb/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 dosage rate.  A repeat application at 7-day intervals may be necessary.	Apply the specified amount of Acephate 90 WDG/1000 sq ft. Use 1.0 to 15.0 gal 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 WDG. 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 oz/50.0 gal of water for a large total mix volume.  Restrictions: Do not irrigate after application.

### GOLF COURSE TURF cont'd.: 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		
<b>PLANTS</b>	INSECTS	WDG/1000 SQ FT	TIME OF APPLICATION	APPLICATION DIRECTIONS
Golf Course Turf <i>cont'd</i> .	Grasshoppers Greenbug (Schizaphis graminun)	0.4 oz (1.11 lb/A)	Apply when insects or their damage first appear. Repeat as necessary.  A repeat application at 7-day	90 WDG/1000 sq ft. Use 4.0 to 15.0 gal water/1000 sq ft to obtain good coverage.
			intervals may be necessary.	Restrictions:  Do not mow turfgrass for at least 24 hrs after application.
Dichondra	Cutworm	0.8 to 1.6 oz	As the insects appear.	Apply the specified amount of Acephate
(Golf Course	Flea beetle	(2.2 to 4.44 lb/A)	Repeat at 2-week intervals	90 WDG/1000 sq ft.
Ťurf)	Southern	, , , , , , , , , , , , , , , , , , ,	as necessary.	Use a minimum of 15.0 gal
,	armyworm			water/1000 sq ft to obtain good
	Yellow striped			coverage.
	armyworm			

#### **OUTDOOR WASP AND PERIMETER SPRAY**

#### 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.

		AMOUNT ACEPHATE		
LOCATION	INSECTS	90 WDG/GAL	TIME OF APPLICATION	APPLICATION DIRECTIONS
Outdoor Wasp and Perimeter Area	Wasps	1.6 oz (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 WDG/gal. Apply as a spot treatment to the nest, nest entrance, and surrounding areas where the wasps land.
	Ants (including Imported Fire Ants and Harvester Ants) Cockroaches Crickets Earwigs Pillbugs (Perimeter treatment)	1.6 oz (0.10 lb)	As insects appear.	Apply the specified amount of Acephate 90 WDG/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**

#### **RESTRICTIONS:**

- Do not exceed 0.75 pound active ingredient per 100 gallons water as a single application to crops grown for cut flower production and 1.0 pound active ingredient per 100 gallons for all other greenhouse and outdoor ornamental plants.
- 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.

PLANTS	PESTS CONTROLLED	ACEPHATE 90 WDG APPLICATION RATE/100 GAL	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 oz)	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 WDG in 100 gal 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 lb (17.7 oz)	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
Cissus antarctica
Ficus triangularis
Fittonia verschaffelti
Maranta leuconeura kerchoveana

Plectranthus australis
Polypodium aureus
Polystichum
Pteris ensiformis
Tolmiea menziesii

Pachystachya lutea

Before treating large plantings, spray a test sample of plants and observe for 2 weeks for varietal phytotoxicity. Acephate 90 WDG 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
Iceberg Wild Honey

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

#### RESTRICTIONS:

- Do not apply more often than every 5 days.
- Do not exceed 0.75 pound active ingredient per 100 gallons water as a single application to crops grown for cut flower production and 1.0 pound active ingredient per 100 gallons for all other greenhouse and outdoor ornamental plants.

PLANTS	PESTS CONTROLLED	AMOUNT ACEPHATE 90 WDG/100 GAL	TIME OF APPLICATION	APPLICATION DIRECTIONS
Roses	Leafrollers	0.5 to 0.83 lb (8.7 to 13.3 oz)	As leafrollers begin to appear. Use the higher amount listed when large larvae are present.	Apply the specified amount of Acephate 90 WDG in 100 gal 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 oz)	As aphids begin to appear.	Apply the specified amount of Acephate 90 WDG in 100 gal with a hydraulic
Foliage Plants Orchids Poinsettia	Mealybugs Thrips Whiteflies	0.55 lb (8.7 oz)	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.  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 WDG and Tame alone.
	Scales (Crawlers)	0.55 lb (8.7 oz)	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 oz) plus 10.67 fl oz (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 oz/100 gal (see Tame label for instructions).	
Carnations Chrysan- themums Roses	Aphids Thrips	0.55 lb (8.7 oz)	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 HANDLING:** 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, unless allowed by state and local ordinances.

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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