

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 2, 2016

Mr. Scott Baker Director of Regulatory Axion Ag Products, LLC. 4850 Hahns Peak Drive, Suite 200 Loveland, CO 80538

Subject: Label and CSF Amendment – Revised label to match a cited labels to meet the

requirements to add alternate formulations 1 and 2 as 100% repacks

Product Name: AX Acephate 90 WDG EPA Registration Number: 89167-27 Application Date: February 29, 2016

Decision Number: 514562

Dear Mr. Baker:

The amended label and CSF referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are 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.

Please note that the record for this product currently contains the following CSFs:

- Basic CSF dated 11/11/2012
- Alternate CSF 1 dated 02/29/2016
- Alternate CSF 2 dated 11/07/2014

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

Page 2 of 2 EPA Reg. No. 89167-27 Decision No. 514562

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.

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 Eric Bohnenblust by phone at (703) 347-0426, or via email at Bohnenblust.eric@epa.gov.

Sincerely,

Richard Gebken Product Manager 10

Invertebrate & Vertebrate Branch 2

Office of Pesticide Programs

Enclosure

# **AX ACEPHATE 90 WDG**

# **ACTIVE INGREDIENT:**

Acephate (O,S-Dimethyl acetylphosphoramidithioate):	90.0%
OTHER INGREDIENTS:	<u>10.0%</u>
TOTAL:	100.0%

# KEEP OUT OF REACH OF CHILDREN

# **CAUTION**

See Inside Booklet For First Aid, Precautionary Statements And **Directions For Use Including Storage And Disposal Instructions** 

EPA REG. NO. 89167-27

<b>EPA</b>	<b>EST</b>	. N	0.	

NET WEIGHT \_\_\_\_\_LBS.(\_\_\_\_KG)

MANUFACTURED FOR **AXION AG PRODUCTS LLC** 4850 Hahns Peak Drive, Suite 200 Loveland, CO 80538

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Page 1 of 40

ACCEPTED

03/02/2016

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 89167-27

# CONTENTS

CONTENT	PAGE
COTTON	7
COTTON FOLIAR	7
COTTON TANK MIXES	11
COTTON TANK MIXES WITH PYRETHROIDS	12
FIELD CROPS	14
TOBACCO	15
FRUIT CROP	18
VEGETABLE CROPS (EXCEPT SUCCULENT GREEN BEANS)	20
NON-BEARING CITRUS	23
SPECIALITY USES	24
CONTAINER GROWN NURSERY STOCK	26
ORNAMENTAL TREES & SHRUBS	26
GOLF COURSE TURF	30
OUTDOOR WASP AND PERIMETER SPRAY	33
OUTDOOR FLORAL CROPS AND GROUND COVERS	34
COMMERCIAL GREENHOUSE FLORAL AND FOLIAGE PLANT CROPS	34

Page 2 of 40

	FIRST AID
	Acephate is an organophosphate, cholinesterase inhibitor
If swallowed:	Call a poison control center or doctor immediately for treatment advice.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
	Do not give anything by mouth to an unconscious person.
If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
0,00.	<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 or clothing:	Take off contaminated clothing.
	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air.
ii iiiiididai	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. You may also contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information.

### 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

Page 3 of 40

Chemical-resistant gloves

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

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

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

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Controls**

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 hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- · Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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.

# **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.

Page 4 of 40

#### 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.

#### PRODUCT INFORMATION

AX Acephate 90 WDG is a dispersible granule used as an insecticide for control of pests on selected agricultural crops and in certain non-crop areas. The active ingredient in AX 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 AX 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 AX 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 AX Acephate 90 WDG to maintain control only as directed.

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

Page 5 of 40

#### **TANK MIXES**

- When tank mixing AX 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.

#### RESTRICTIONS

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

#### 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 3-10 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 3-10 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.

#### Page 6 of 40

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 lbs. a.i. 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 lb a.i. per acre. For all remaining areas, the maximum single aerial application rate is 0.75 lb a.i. per acre.

# COTTON: IN-FURROW

By Ground AT-PLANTING APPLICATION: 3 to 5 gals/A of spray

PESTS	RATES OF AX ACEPHATE	REMARKS	Minimum Spray
CONTROLLED	90 WDG PER ACRE		Interval (Days)
Aphids* Black (Greasy) Cutworm (Except CA) Thrips (including Western Flower Thrips) *Excluding Cotton Aphids in AZ and CA	0.56 to 1.1 lb.  NOTE: For the Black Lands Region of Texas, use the 1.1 lbs./acre application rate	Use flat-fan nozzles for in-furrow application. Align nozzles to ensure good spray deposition into the seed furrow. Do not use cone type nozzles since unacceptable spray deposition may occur. Securely fasten spray-system tubing to furrow opener and check frequently to ensure proper positioning and operation. AX Acephate 90 WDG can be mixed with fungicides that are sprayed in-furrow for disease control.	N/A

COTTON: FOLIAR

By Ground: Minimum of 10 to 25 gallons of water/A

PESTS RATES OF AX ACEPHATE 90 CONTROLLED WDG PER ACRE		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 and 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 as necessary to maintain control.*	7	21	
Whitefly (excluding Sweetpotato 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	

PESTS CONTROLLED	RATES OF AX ACEPHATE 90 WDG PER ACRE	REMARKS	Minimum Spray Interval (Days)	PHI
Bollworm Tobacco Budworm (Adults, Larvae)  Eggs/ DEADHATCH®	0.5 to 1.1 lb. (East of Rockies) 1.1 lb. (AZ & CA) 0.25 to 0.5 lb.	Early Season: Use 0.5 lb/A for light infestation.  Mid and Late Season: Use 0.8 to 1.1 lb/A for moderate to severe infestations.  Apply when eggs appear and repeat at 7 day spray intervals. Moths of budworm larvae are controlled by direct contact with spray. Moth kill is most likely to occur when late evening applications are made.  DEADHATCH®: Control of emerging larvae by consumption of treated egg casings.	7	21
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 as necessary to maintain control.*	7	21

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

COTTON: FOLIAR

By Air: Minimum of 3 to 10 gallons water/A
(Minimum of 5 gallons water/A in AZ & CA)

Page 9 of 40

PESTS CONTROLLED	RATES OF AX 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 and 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 Sweetpotato 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) Eggs/ DEADHATCH®	0.5 to 0.83 lb. (East of Rockies) 1.1 lb (AZ & CA) 0.25 to 0.5 lb	Early Season: Use 0.5 lb/A for light infestation. Mid and Late Season: Use 0.8 to 1.1 lb/A for moderate to severe infestations. Apply when eggs appear and repeat at 7 day spray intervals.* Moths of budworm larvae are controlled by direct contact with spray. Moth kill is most likely to occur when late evening applications are made. DEADHATCH: control of emerging larvae by	7	21
Stink Bugs	0.83 lb.	consumption of treated egg casings.  Apply when eggs appear and repeat at 7 day spray intervals.*	7	21

Page **10** of **40** 

PESTS CONTROLLED	RATES OF AX ACEPHATE 90 WDG	REMARKS	Minimum Spray Interval (Days)	PHI
Pink Bollworm (AZ & CA)	1.1 lb.	Apply when insects appear and repeat at 7 day spray intervals.*	7	21
Cutworms	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 as necessary to maintain control.	7	21

<sup>\*</sup>Not to exceed a maximum of 4.0 lbs a.i. 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 to 25 gals water/A of spray

By Air: 3 to 10 gals/A of spray (minimum of 5 gals water/A 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 lbs a.i. 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 lb a.i. per acre. For all remaining areas, the maximum single aerial application rate is 0.75 lb a.i. per acre.

PEST CONTROLLED	AX ACEPHATE 90 WDG and Tank Mix Partner	AMOUNT OF AX ACEPHATE 90 WDG + Tank Mix Partner Per Acre	REMARKS	Minimum Spray Interval (Days)	PHI
Sweet potato	AX Acephate 90 WDG	0.5 lb	Follow all applicable directions,	3	21
Whitefly	+	+	restrictions, and precautions on		
(Silverleaf	DANITOL 2.4 EC Spray	10-2/3 to 16 fl oz	the EPA registered label for		
Whitefly)			DANITOL 2.4 EC Spray		

Page 11 of 40

PEST CONTROLLED	AX ACEPHATE 90 WDG and Tank Mix Partner	AMOUNT OF AX ACEPHATE 90 WDG + Tank Mix Partner Per Acre	REMARKS	Minimum Spray Interval (Days)	PHI
Armyworms (excluding Beet Armyworm) Bollworm Cabbage Looper Cotton Aphid Cutworms	AX Acephate 90 WDG	0.28 to 1.1 lbs (ground) or 0.28 to 0.83 lb (aerial)	Follow all applicable directions, restrictions and precautions on the EPA registered label for LORSBAN 4E. Cutworms: Use 0.8 lb/A AX Acephate 90 WDG. By Ground: Ground application	7	21
Fleahopper Grasshoppers Pink Bollworm Plantbugs (Lygus, Mirids)	+ LORSBAN 4E	+	is recommended. Control is most effective when ground application is made in the evenings and sprays are directed toward the base and		
Salt Marsh Caterpillar Thrips (Including Western Flower Thrips) Tobacco Budworm Whitefly (Excluding Sweet potato/Silverleaf Whitefly)	or CHLORPYRIFOS 4E	1 to 2 pts	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.		

#### 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

#### RESTRICTIONS:

- Do not feed gin trash or treated forage to livestock.
- Do not allow livestock to graze on treated areas.

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 to 25 gals water/A of spray

By Air: 3 to 10 gals/A of spray (minimum 5 gals water/A in CA).

PESTS CONTROLLED	AX ACEPHATE 90 WDG AND TANK MIX PARTNER	AX ACEPHATE 90 WDG + TANK MIX PARTNER (PER ACRE)	REMARKS	Minimum Spray Interval (Days)	PHI
Aphids Bollworm Cabbage Looper Cotton Leaf Perforator	AX Acephate 90 WDG  + one of the following:	0.5 to 1.1 lb. (ground) or 0.5 to 0.83 lb (air) + one of the following:	Apply when eggs or insects first appear or damage is first noted.	7	21
Cutworms Fall Armyworms Fleahoppers	AMMO® 2.5EC*	Refer to the AMMO® 2.5EC approved label for use instructions.	Stink Bugs: Use 0.83 lb/A of AX ACEPHATE 90 WDG.	7	
Pink Bollworm (AZ & CA) Plantbugs	ASANA® XL*	Refer to the ASANA® XL approved label for use instructions.	*Cutworms: Use 0.83 lb/A of AX ACEPHATE 90 WDG.		
Stinkbugs Sweetpotato/ Silverleaf Whitefly	BAYTHROID® 2 EC	Refer to the BAYTHROID® 2 EC approved label for use instructions.	By Ground: Ground application is		

<sup>\*\*</sup>Do not apply more than 4 lbs. a.i./A per season. This includes all methods of application. This includes the use of AX Acephate 90 WDG as an in-furrow at planting treatment, all foliar spray, liquid in-furrow application and seed treatment uses.

PESTS CONTROLLED	AX ACEPHATE 90 WDG AND TANK MIX PARTNER	AX ACEPHATE 90 WDG + TANK MIX PARTNER (PER ACRE)	REMARKS	Minimum Spray Interval (Days)	PHI
Aphids Bollworm Cabbage Looper Cotton Leaf Perforator	AX Acephate 90 WDG  + one of the following:	0.5 to 1.1 lb. (ground) or 0.5 to 0.83 lb (air) + one of the following:	Apply when eggs or insects first appear or damage is first noted.	7	21
	CAPTURE® 2 EC	Refer to the CAPTURE® 2 EC approved label for use instructions.			
	KARATE® 1E (Except CA)	Refer to the Karate® 1E approved label for use instructions.			
	SCOUT X-TRA® (Except CA)	Refer to the SCOUT X-TRA® approved label for use instructions.			28

# RESTRICTIONS

\*Do not apply more than 4 lbs./A (4 lbs. a.i.) per season. This includes all methods of application.

# RESISTANCE MANAGEMENT

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

# FIELD CROPS

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

CROP	INSECTS	AMOUNT OF AX ACEPHATE 90 WDG	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (days)	PHI
Peppermint, Spearmint	Alfalfa looper Cutworm Aphids	1.11 lbs	Make the initial application when eggs or insects first appear using a minimum of 20-100 (ground) or 5-10 (aerial) gal of water/A.	7	14
			RESTRICTIONS:  Do not apply more than 2.0 lbs. a.i. (2.22 lbs. product) per acre per season.  Maximum of 2 applications per crop season.  The grazing of animals on treated areas and the feeding of spent mint hay to animals are prohibited.		
Peanuts (for postemergence, foliar, ground/aerial)	Grasshoppers Thrips Corn earworms Fall armyworms Leafhopper Loopers Velvetbean Caterpillar	0.28-0.55 lb. 0.55-0.83 lb. 0.83-1.11 lbs.	Apply in water at 10 to 50 gals. spray per acre by ground or in 5 to 10 gals. spray per acre 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. a.i. (4.44 lbs. product) per acre per crop cycle. This includes all methods of application.	7	14 (of digging)

Page **15** of **40** 

CROP	INSECTS	AMOUNT OF AX ACEPHATE 90 WDG	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (days)	PHI
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	0.28-0.55 lb 0.55-1.1 lbs. 0.83-1.1 lbs.	By Air: 5 to 10 gallons/Acre of spray By Ground: 10 to 50 gallons/Acre of spray Always read and follow all label directions, restrictions, and precautions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.  RESTRICTIONS:  Do not graze or cut vines for hay or forage.  Do not apply more than 1.5 lbs. a.i./Acre (1.6 lbs. of AX Acephate 90 WDG) per season.	7	14

# TOBACCO

# TOBACCO TRANSPLANT WATER APPLICATION

(Use Prohibited in CA)

CROP	INSECTS	AMOUNT OF AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS
Tobacco	Flea Beetle Green Peach Aphid Tobacco Aphid Cutworms Tobacco Thrips	0.8 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 AX Acephate 90 WDG. Do not apply more than 0.8 lb. AX Acephate 90 WDG per acre as a transplant water application as some phytotoxicity may occur.  RESTRICTIONS:  Do not apply more than 4.0 lbs. a.i. (4.44 lbs. product) per acre per crop cycle. This includes all methods of application.  Apply in a minimum of 100 gals. of water per acre.

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 Prohibited in CA)

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

CROP	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	PHI
Tobacco (Flue-Cured, Air Cured, Dark Fire Cured)	Grasshoppers Green Peach Aphid Flea Beetle	0.28-0.83 lb. 0.55-0.83 lb.	Apply in 10 to 50 gals. water per acre with ground equipment or a minimum of 3 gals. per acre by air.	3
	Hornworm Tobacco Thrips Tobacco Aphid	0.55-0.83 lb.	RESTRICTIONS:  • Do not apply more than 4.0 lbs. a.i.	
	Vegetable Weevils	0.33-0.03 lb.	(4.44 lbs. product) per acre per crop cycle. This includes all methods of	

Page **17** of **40** 

Stinkbugs		application.	
		Apply spray at a minimum of 7	
Budworm	0.83 lb.	days if necessary to maintain control.	
Cabbage Looper			
Cutworm			

# TOBACCO PLANT BED APPLICATION (Use Prohibited in CA)

CROP	INSECTS	AMOUNT OF AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS
Tobacco Bed	Flea Beetle Green Peach Aphid	0.83 lb.	Apply to foliage at the equivalent of 1 tablespoon in 1 gal. of water per every 1,000 sq. ft. of bed.
Treatment	Tobacco Aphid Cutworm		Apply evenly to ensure thorough coverage.  RESTRICTIONS:  Do not apply more than 4.0 lbs. a.i. (4.4 lbs. product) per acre per season. This includes all methods of application.  Apply spray at a minimum of 7 days if necessary to maintain control.

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

CROP	INSECTS	AMOUNT OF AX ACEPHATE 90 WDG	FURTHER USE INSTRUCTIONS
Tobacco	Cutworm Flea beetle Green Peach Aphid Tobacco Aphid	0.83 lb.	Apply to foliage at the equivalent of 1 tablespoon in 3 gals. of water per every 1,000 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.  RESTRICTIONS:  • Do not apply more than 4.0 lbs. a.i. (4.44 lbs. product) per acre per season. This includes all methods of application.  • Apply spray at a minimum of 7 days if necessary to maintain control.

Page 18 of 40

# FRUIT CROP

CROP	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (days)	PHI
Cranberries	Cranberry Blossom Worm Gypsy Moth	1.11 lbs.	Apply using sufficient water to achieve thorough coverage (ground) or in a minimum of 2 gal of water/A (aerial).	N/A	90
	False Armyworm Fireworms		Apply in water by air, ground or with sprinklers.		
	Spanworms Sparganothis		RESTRICTIONS:  Do not apply from start of bloom until all berries have set. When applied via irrigation system, only sprinkler type irrigation equipment can be used.  Limit to one application per growing season.  Maximum of 1 application per growing season.  Do not apply more than 1.0 lb. a.i. (1.11 lbs. product) per acre per crop cycle. This includes all methods of application.		
		1.11 lbs.	Apply using sufficient water to achieve thorough coverage (ground) or in a minimum of 2 gal of water/A (aerial).	N/A	75
			RESTRICTIONS:  • Do not apply from start of bloom until all berries have set; only one application may be applied post-bloom.  • Do not apply more than 1.0 lb. a.i. (1.11 lbs. product) per acre per crop		

Page 19 of 40

CROP	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (days)	PHI
			cycle. This includes all methods of application.  • Limit to one application per growing season.  • When applied via irrigation system, only sprinkler type of irrigation may be used.  • Use limited to MA, NJ, WA, and WI.		

#### SPRINKLER IRRIGATION APPLICATION TO CRANBERRIES

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.  $\label{eq:chemical_problem}$ 

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.

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.

RESTRCTION: 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.

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.

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.

Page 20 of 40

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.

RESTRICTION: Do not apply when wind speed favors drift beyond the area intended for treatment.

**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.

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

CROPS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (Days)	PHI
Beans & Lima Beans (Dry & Succulent)	Fleahoppers Grasshoppers	0.28-0.55 lb	Make the initial application when eggs or insects first appear using a minimum of 20 to 100 gallons	7	14 (dry beans)
Except Succulent Green Beans	Aphids Beanleaf Beetle	0.55 to 1.11 lbs	(ground) or 2 gallons (aerial) of water/A.		1 (lima beans
GIOGN BOARD	Cabbage Looper Cutworms Green Cloverworm Leafhoppers Mexican Bean Beetle Plantbugs (Lygus) Soybean Looper Thrips Whitefly  higher rates.  RESTRICTIONS:  • The feeding of livestock is prohibit • Do not apply m a.i. (2.22 lbs. proper crop cycle. • Do not apply to	RESTRICTIONS:  The feeding of treated vines to livestock is prohibited.  Do not apply more than 2.0 lb a.i. (2.22 lbs. product) per acre		succulent forms)	
	Armyworms Corn Earworm European Cornborer	0.83-1.11 lbs.	shap beans and wax beans).		
Brussels Sprouts, Cauliflower	Green Peach Aphid Cabbage Looper Diamondback Moth Imported Cabbageworm	0.55-1.11 lbs. 1.11 lbs.	Make initial application when eggs or insects first appear using a minimum of 25 to 150 gallons (ground) or 5 gallons (aerial) of water/A.	7	14
			Use the higher listed rate when heavy infestations of aphids are present.		
			RESTRICTIONS:  • The feeding of treated trimmings or the grazing of livestock in treated areas is		

Page 22 of 40

CROPS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (Days)	PHI
			prohibited.  • Do not apply more than 2.0 lb. a.i. (2.22 lbs. product) per acre per crop cycle.		
Celery	Green Peach Aphid	0.55 to 1.11 lbs.	Make the initial application when	7	21
	Beet & Fall Armyworm Cabbage Looper	1.11 lbs.	eggs or insects first appear using a minimum of 50 to 100 gallons (ground) or 5 gallons (aerial) of water/A.	7	21
			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 a.i. (2.22 lbs. product) per acre		
Head Lettuce (Crisphead Type Only)	Aster Leafhopper Green Peach Aphid	0.55-1.11 lbs.	per crop cycle.  Apply using a minimum of 10 to 60 gallons (ground) or 5 gallons (aerial) of water/A.  RESTRICTIONS:	7	21
	Cabbage Looper Armyworm (excluding beet armyworm)	1.11 lbs.	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		

Page 23 of 40

CROPS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (Days)	PHI
			mid-September through November.		
			The feeding of trimmings to livestock, and the grazing of animals on treated areas are prohibited.		
			Maximum of 5 applications per crop season.		
			Do not apply more than 2.0 lb.     a.i. (2.22 lbs. product) per acre     per crop cycle.		
Peppers (non bell type)	Aphids	0.55 lb.	Apply using a minimum of 40 to 150 gallons of water/A.	7	7
			RESTRICTIONS:  Use limited to Midwestern and Eastern states and to PR.  Maximum of 2 applications per crop season.  Do not apply more than 1.0 lb.		
			a.i. (1.11 lbs. product) per acre per crop cycle.		
Peppers (Bell type)	Grasshoppers Cabbage Looper Green Peach Aphid Tobacco Hornworm European Cornborer	0.28-1.11 lbs. 0.55-1.11 lbs. 0.83-1.11 lbs.	Make the initial application when eggs or insects first appear using a minimum of 25 to 150 gallons (ground), 3 gallons (aerial), or 5 gallons (aerial in CA) of water/A.	7	7
			RESTRICTION:  • Do not apply more than 2.0 lbs. a.i. (2.22 lbs. product) per acre		

Page 24 of 40

CROPS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (Days)	PHI
			per 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.

CROPS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS	Minimum Spray Interval (Days)	PHI
CITRUS (Non-bearing)	Aphids Grasshoppers Katydid Mealybugs Orangedogs Plantbugs Thrips Whiteflies (except Sweetpotato/Silverleaf)	0.5 to 0.83 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 gallons of water/A by ground equipment.	7	N/A
	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.		
	Ants (excluding fire, harvester, carpenter and pharaoh)	Mound Treatment Ground 2/3 oz in 5 gal water	Apply 1 gal. of the finished spray to each mound area by sprinkling the mound until it is wet and treat a 4 ft diameter circle around the mound.	N/A	

# SPECIALTY USES

# Restriction:

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.

CROPS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS
Non-crop Areas (field borders, fencerows, roadsides, ditch-banks and borrow pits)	Grasshoppers	0.28 lb.	Apply using a minimum of 10 to 20 gallons (ground), 1 gallon (aerial), or 5 gallons (aerial in CA) of water per acre.  RESTRICTION:  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 to 2 teaspoons over the mound. Drench Method: Mix 2/3 oz. in 5 gals. of water. Apply 1 gallon of mix to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the 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 treat mound more than once per season.  Maximum of 2 tsp product/mound (dry method) per season.  The grazing or feeding of vegetation cut from treated areas is prohibited.  Do not use on turf.

Non-Crop Areas (Wasteland)

CROPS	INSECTS	AMOUNT AX ACEPHATE 90	FURTHER USE INSTRUCTIONS
		WDG PER ACRE	
Foliar Ground/Aerial	Black Grass Bugs Grasshoppers Mormon Crickets	1.6 to 2.2 oz	Apply using a minimum of 10 to 20 gallons (ground), 1 to 5 gallons (aerial), or 5 gallons (aerial in CA) of water/A.
			RESTRICTION:

Page 26 of 40

CROPS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER ACRE	FURTHER USE INSTRUCTIONS
			The grazing or feeding of vegetation cut from treated areas is prohibited.

# CONTAINER GROWN NURSERY STOCK

PLANTS	INSECTS	AMOUNT OF AX ACEPHATE 90 WDG	TIME OF APPLICATION	APPLICATION DIRECTIONS
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 AX Acephate 90 WDG per 100 gals. 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 AX ACEPHATE 90 WDG PER 100 GALS.	TIME OF APPLICATION	Minimum Spray Interval (Days)	APPLICATION DIRECTIONS
Trees and	Aphids	0.28 lb – 1.1 lbs.	As the insects or damage	14	Apply the specified
Shrubs	Bagworms	(4.4 – 17.7 oz)	first appear.		amount of AX Acephate

Page 27 of 40

PLANTS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER 100 GALS.	TIME OF APPLICATION	Minimum Spray Interval (Days)	APPLICATION DIRECTIONS
(except Flowering Crabapple, see below)	Birch Leafminer Tent Caterpillar* Lace Bugs Leafrollers				90 WDG 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 – 1.11 lbs. (8.7 – 17.7 oz)	As insects begin to appear		*Mist blower application. Adjust rates to 1.11 lbs. per 100 gals. water for Gypsy Moth control and 0.83 lb per 100 gals water for Tent Caterpillar control.
	Scales (Crawlers)	0.55 – 1.11 lbs. (8.7 – 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.	Applica Huckle Gilead Lomba Viburn	Application to Huckleberry, Balm of Gilead, Cottonwood, Lombardy Poplar and Viburnum suspensum may result in phytotoxicity.
			production.		Nursery crops. Before treating large plantings, spray only a few plants and observe two weeks for phytotoxicity.
	Ponderosa Pine Needle Miner	0.55 – 1.11 lbs. (8.7 – 17.7 oz)	Time of application is important. Consult your Farm Advisor or County Extension Agent.		Apply the specified amount of AX Acephate 90 WDG in 100 gals. water with a hydraulic sprayer as a full coverage
	Grasshoppers	0.55 – 1.11 lbs. (8.7 – 17.7 oz)	As the grasshoppers begin to appear.		spray.
	California Oakworm	0.28 lb – 1.1 lbs. (4.4 – 17.7 oz)	As the insects begin to appear. Use the higher		Apply the specified amount of AX Acephate

Page 28 of 40

PLANTS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER 100 GALS.	TIME OF APPLICATION	Minimum Spray Interval (Days)	APPLICATION DIRECTIONS
	Cankerworms (Spring & Fall)		amount when the larger larvae are present.		90 WDG in 100 gals. water with a hydraulic
	Nantucket Pine Tip Moth Larvae	1.11 lbs (17.7 oz)	Time of application is important. Consult your Farm Advisor or County Extension Agent. Repeat applications will be required for subsequent generations.		sprayer.
	Root Weevil Adults	1.11 lbs. (17.7 oz)	Apply when first feeding damage occurs. Repeat applications at four week intervals until the first heavy frost, may be necessary for complete foliage protection.		Apply the specified amount of AX Acephate 90 WDG in 100 gals. water with a hydraulic sprayer as a full coverage spray.
	Box Elder Bugs Sawflies Budworms Leafhoppers	1.11 lbs. (17.7 oz)	As the insects begin to appear.		
	Japanese Beetle	1.11 lbs. (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 lbs. (17.7 oz)	As the larvae begin to appear. AX Acephate 90 WDG will not prevent Elm Leaf Beetle eggs from hatching.		
Douglas Fir, Christmas Trees	Douglas Fir Needle Midge	0.55 lb (8.7 oz)	Make application no more than 2 weeks prior to bud burst. For additional pest	3 days for rates up to and	Apply a minimum of 2 weeks prior to bud burst using a minimum of 100

Page 29 of 40

PLANTS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER 100 GALS.	TIME OF APPLICATION	Minimum Spray Interval (Days)	APPLICATION DIRECTIONS
			management information, consult your county extension service.	including 0.5 lbs. a.i./A and 7 days for rates over 0.5 lbs. a.i./A.	(ground) or 2 (aerial) gal. of water/A.  RESTRICTIONS:  Maximum of 1 application per crop season.  Do not apply more than 0.55 lb. product per acre per crop cycle.
Flowering Crabapples	Aphids Tent Caterpillars Leafrollers	0.28 lb. (4.4 oz)	As the insects begin to appear.	28	Apply the specified amount of AX 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.  RESTRICTION:  Do not apply more often than 3 times in a growing season.
Crepe Myrtle	Aphids	1/3 lb. in 6 to 8 tablespoons of water	As aphids begin to appear.	3 days for rates up to and including 0.5 lbs. a.i./A and 7 days for	Make a paint-on slurry to the trunk in a band 6-12 inches above the ground by mixing the specified amount of AX Acephate 90 WDG. Remove the loose bark from the trunk

Page 30 of 40

PLANTS	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER 100 GALS.	TIME OF APPLICATION	Minimum Spray Interval (Days)	APPLICATION DIRECTIONS
				rates over 0.5 lbs. a.i./A.	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 lbs ai per acre per year.

PLANTS	INSECTS	AX ACEPHATE 90 WDG	TIME OF APPLICATION	APPLICATION
		PER 1,000 SQ. FT.		DIRECTIONS

PLANTS	INSECTS	AX ACEPHATE 90 WDG PER 1,000 SQ. FT.	TIME OF APPLICATION	APPLICATION DIRECTIONS
Golf Course Turf	Fall Armyworm Yellow Striped Armyworm	0.4 to 1.0 oz. (1.1 to 2.71 lbs./acre)	As the insects appear. A repeat application at 2 week intervals may be necessary.	Apply the specified amount of AX Acephate 90 WDG per 1,000 sq ft.
	Southern Armyworm			Use a minimum of 5 gals. water per 1,000 sq ft to obtain good coverage.
	Cutworm	1.0 to 1.6 oz. (2.7 to 4.3 lbs./acre)		obtain good coverage.
	Chinch Bugs  1.0 to 1.6 oz. (2.7 to 4.3 lbs. / acre)  Apply as needed for adult population knockdown. Repeat application at 10 to 14 days if needed.  Sod Webworm (Crambus spp.)  0.4 to 0.8 oz. (1.11 to 2.22 lbs./acre)  As sod webworms begin to appear. Use the higher amount when quick knockdown is	Apply the specified amount of AX Acephate 90 WDG per 1,000 sq ft.		
			needed.	Use 1 to 15 gals. water per 1,000 sq ft to obtain good coverage.
		Apply the specified amount of AX Acephate 90 WDG per 1,000 sq ft.		
			needed or with heavy infestations. Repeat application may be necessary. A repeat application at 7 day intervals may be necessary.	Use 1 to 15 gals. water per 1,000 sq ft to obtain good coverage.
	Leafhopper	0.8 oz. (2.22 lbs./acre)	As the leafhoppers begin to appear. A repeat application at 7 day intervals may be necessary.	Apply the specified amount of AX Acephate 90 WDG per 1,000 sq ft. Use 1 to 15 gals. water per 1,000 sq ft to obtain good coverage.

PLANTS	INSECTS	AX ACEPHATE 90 WDG PER 1,000 SQ. FT.	TIME OF APPLICATION	APPLICATION DIRECTIONS
	Mole Crickets (except CA)	0.8 to 1.6 oz. (2.22 to 4.3 lbs./acre)	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 AX Acephate 90 WDG per 1,000 sq ft.  Use 1 to 15 gals. water per 1,000 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 AX 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 teaspoons per gallon of water for small total mix volumes or 5 fl. oz. per 50 gals. of water for a large total mix volume.  RESTRICTION:  Do not irrigate after application.

PLANTS	INSECTS	AX ACEPHATE 90 WDG PER 1,000 SQ. FT.	TIME OF APPLICATION	APPLICATION DIRECTIONS
	Greenbug (Schizaphis graminun)	0.4 oz (1.11 lbs per acre)	Apply when insects or their damage first appear. Repeat as necessary.	Apply the specified amount of AX Acephate 90 WDG per 1,000 sq ft.
	Grasshoppers		A repeat application at 7 day intervals may be necessary.	Use 4 to 15 gals. water per 1,000 sq ft to obtain good coverage.
				RESTRICTION: Do not mow turfgrass for at least 24 hours after application.
Dichondra (Golf Course Turf)	Cutworm Flea Beetle Southern Armyworm Yellow Striped Armyworm	0.8 to 1.6 oz (2.2 to 4.3 lbs per acre)	As the insects appear. Repeat at 2 week intervals as necessary.	Apply the specified amount of AX Acephate 90 WDG per 1,000 sq ft. Use a minimum of 15 gals. water per 1,000 sq ft to obtain good coverage.

# OUTDOOR WASP AND PERIMETER SPRAY

### Restrictions:

- 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.
- The use of low pressure handwand equipment for perimeter or wasp treatments is prohibited.

LOCATION	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER GALLON	TIME OF APPLICATION	APPLICATION DIRECTIONS
Outdoor wasp and perimeter area	Wasps	1.3 oz. (0.08 lb.)	Treat early or late in the day as wasps are less active during these times.	Apply the specified amount of AX Acephate 90 WDG per gallon. Apply as a spot treatment to the nest, nest entrance, and surrounding areas where the wasps land.

LOCATION	INSECTS	AMOUNT AX ACEPHATE 90 WDG PER GALLON	TIME OF APPLICATION	APPLICATION DIRECTIONS
	Ants (including Imported Fire Ants and Harvester Ants) Crickets Cockroaches Earwigs Pillbugs (Perimeter treatment)	1.3 oz. (0.08 lb.)	As insects appear	Apply the specified amount of AX Acephate 90 WDG per gallon. Apply to a band of soil 6 to 10 feet adjacent to the structure and to a height of 2 to 3 feet 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 pounds of active ingredient per 100 gallons water as a single application to crops grown for cut flower production and 1.0 lb 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	AX ACEPHATE 90 WDG APPLICATION RATE PER 100 GALS.	TIME OF APPLICATION	APPLICATION DIRECTIONS
Chrysanthemums Daisies Dahlias Easter Lily Gladioli Gypsophila Pachysandra Pansy Peony Roses Sedum Statice Strawflower Yarrow Zinnia	Aphids Thrips Lygus	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 AX Acephate 90 WDG in 100 gallons 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	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.	

PLANTS	PESTS CONTROLLED	AX ACEPHATE 90 WDG APPLICATION RATE PER 100 GALS.	TIME OF APPLICATION	APPLICATION DIRECTIONS
Roses	Japanese Beetle	12.3 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

#### 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 lb active ingredient per 100 gallons for all other greenhouse and outdoor ornamental plants.

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

Before treating large plantings, spray a test sample of plants and observe for 2-weeks for varietal  $\,$ 

phytotoxicity.

AX 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 Bonnie Jean
Dixie Garland
Gem Iceberg
Pride Showoff
Statesman Tally Ho
Westward Ho Wild Honey

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

PLANTS	PESTS CONTROLLED	AMOUNT AX ACEPHATE 90 WDG PER 100 GALLONS	TIME OF APPLICATION	APPLICATION DIRECTIONS
Roses	Leafrollers	0.5 lb. 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 AX Acephate 90 WDG in 100 gallons with a hydraulic sprayer as a full coverage spray. Applications to roses in flower may cause damage to flower.
Foliage Plants Anthuriums	Aphids	0.28 lb. (4.3 oz.)	As aphids begin to appear.	Apply the specified amount of AX Acephate 90 WDG in 100
Cacti Orchids Poinsettia	Mealybugs Thrips Whiteflies	0.55 lb. (8.7 oz.)	As insects begin to appear. To maintain control of mealybugs and whiteflies,	gallons with a hydraulic sprayer as a full coverage spray. A wetting agent may
			repeat applications at a minimum of 14-day spray intervals.	be necessary when applying to difficult to wet foliage.
	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	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	Apply as a tank mix at a volume that ensures good coverage. To avoid potential resistance, follow the Tame® label for
		10 2/3 fl. oz. (0.2 lb. a.i.) Tame® 2.4 EC Spray	Tame® alone at 16 fl. oz./100 gals. (See Tame® label for instructions).	specific instructions on the alternating use of Tame® plus AX Acephate 90 WDG and Tame® alone.

PLANTS	PESTS CONTROLLED	AMOUNT AX ACEPHATE 90 WDG PER 100 GALLONS	TIME OF APPLICATION	APPLICATION DIRECTIONS
Roses Carnations Chrysanthemums	Aphids Thrips	0.55 lb. (8.7 oz.)	As aphids begin to appear. As thrips being 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:  RESTRICTIONS:  A minimum of 5 days between applications to roses. A minimum of 28 days between applications to Carnations and Chrysanthemums.	Apply with a hydraulic sprayer as a full coverage spray. Application to Chrysanthemums and Roses with open flowers will cause injury to the flowers.

# STORAGE AND DISPOSAL

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

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

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions tor Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product.

Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other

Page 39 of 40

materials or other influencing factors in the use of the product, which are beyond the control of AXION AG PRODUCTS LLC or Seller, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold AXION AG PRODUCTS LLC and Seller harmless for any claims relating to such factors.

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