

# Acephate 97 WDG

GROUP 1B INSECTICIDE

## Agricultural & Fire Ant Insecticide

For Use on beans, celery, cole crops, cotton, cranberries, mint, non-bearing citrus, non-crop areas, peanuts, peppers, soybeans, tobacco, container nursery stock, ornamental trees and shrubs, golf course and sod farm turfgrass, outdoor floral crops and ground covers, and greenhouse floral and foliage crops.

ACTIVE INGREDIENT:	% BY WT.
Acephate (O,S-Dimethyl acetylphosphoramidothioate) . . .	97.0%
OTHER INGREDIENTS: . . . . .	3.0%
TOTAL . . . . .	100.0%

Acephate 97 WDG is a *granular insecticide*.

EPA Reg. No. 66222-266

EPA Est. No. 084049-CHN-001

## KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

For additional Precautionary Statements, First Aid, and Directions for Use, see inside of this booklet.

How can we help? 1-866-406-6262

Net Contents

# 10 pounds



## INSECTICIDE

# ADAMA ESSENTIALS

## FIRST AID

Contains an organophosphate that inhibits cholinesterase

<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to by a poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>Note to Physician:</b> Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine in antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment information, call Prozar 24 hours a day at 1-877-250-9291.	

In case of spills, fire, leaks or accidents call 1-800-535-5053.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Harmful if swallowed or inhaled. Causes eye irritation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash clothing before reuse.

### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. Other options include natural rubber >14 mils and polyethylene.

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.

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, or butyl rubber >14 mils or nitrile rubber >14 mils or neoprene rubber >14 mils or polyvinyl chloride or Viton >14 mils
- Shoes plus socks
- A NIOSH approved particulate respirator with any N, R, or P filter, NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.
- In addition, mixers, loaders, and applicators supporting or making broadcast applications to turf must wear: A NIOSH approved particulate respirator with any N, R, or P filter, NIOSH 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. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### Engineering controls statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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.
- 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. 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. Cover with soil or soil-incorporate spills.

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

This product is highly toxic to bees exposed to direct treatment 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.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Eliminations System (NPDES) permitted and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

#### **OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, AND ESTUARIES.**

Apply only during alternate years in fields adjacent to aquatic areas listed above.

Do not apply by ground or air within 100 feet of aquatic areas listed above.

Do not cultivate within 10 feet of an aquatic area to allow growth of a vegetative filter strip.

## DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

#### **Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or Viton
- 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 Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift. Do not enter or allow others to enter treated areas until sprays have dried.

### ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on this label as soon as practical after last application. Any crop not specified on this label may be planted into treated areas 120 days after last application.

### PRODUCT INFORMATION INFORMATION

ACEPHATE 97 WDG is an insecticide for control of pests on selected agricultural crops and in certain non-crop areas. The active ingredient in ACEPHATE 97 WDG is acephate, a water soluble insecticide readily absorbed by plant roots and foliage to give systemic control of feeding insects. Insect pests are controlled more effectively by ACEPHATE 97 WDG through ingestion than by contact. Application of ACEPHATE 97 WDG to maintain control should be repeated only as directed by the label.

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

**NOTE:** This product is sold by weight and package is full when packed, but due to the product's nature, settling is likely to occur.

When an adjuvant is to be used with this product, ADAMA suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

## RESISTANCE MANAGEMENT RECOMMENDATIONS (FOR INSECTICIDE)

Acephate 97 WDG contains a Group 1B insecticide. Insect/mite biotypes with acquired resistance to Group (target site of action group number) may eventually dominate the insect/mite population if Group 1B insecticides/acaricides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Acephate 97 WDG or other Group 1B.

To delay insecticide resistance consider:

- Avoiding the consecutive use of Acephate 97 WDG or other group 1B insecticides/acaricides that have a similar target site of action, on the same insect/mite species.
- Using tank-mixtures or premixes with insecticides/acaricides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide/acaricide use on a comprehensive IPM program.
- Monitoring treated insect/mite populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide/acaricide resistance management and/or IPM recommendations for the specific site and resistant pest problems.

## APPLICATION PROCEDURES

**Spray Volume:** Acephate 97 WDG may be applied in a minimum of 10 gallons of spray solution per acre by ground sprayer or in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied. If necessary, increase the spray volume per acre for complete crop coverage.

**Chemigation:** Applications to cranberries may be made using sprinkler irrigation systems. Do not apply by chemigation to any other crop, or to cranberries using any other type of irrigation system. For overhead chemigation, apply only when wind speed is 10 mph or less.

## Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment-and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions regarding spraying.

Do not apply under conditions involving possible drift to food, forage, or other plantings that might be damaged or the crops thereof rendered unfit for sale, use, or consumption.

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.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Apply only as a medium or coarser spray (ASABE standard 572.1) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Apply only when the wind speed is 2–10 mph at the application site.

### For ground applications:

- Do not apply with a nozzle height greater than 4 feet above the crop canopy.

### For air blast applications:

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

### **For aerial applications:**

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or 90% of the rotor blade diameter. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45°.
- 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.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Spray Drift Management** section.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap as crop injury may result.

For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

### **Information on Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **Wind, Temperature and Humidity and Temperature Inversions** sections). Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. Apply in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment.

#### **Controlling Droplet Size**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle-type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

### **Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

### **Application Height**

Applications should be made at the lowest height consistent with efficacy and flight safety. Do not make at a height greater than 10 feet above the top of the largest plants unless a greater height is recommended for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

### **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

## Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

## Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

## Mixing procedures

1. Be sure sprayer is clean and not contaminated with any other materials or crop injury or sprayer clogging may result.
2. Fill tank 1/4 full with clean water.
3. Start agitation.
4. Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
5. Pour product directly from container into partially filled spray tank.
6. Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action.
7. Add emulsifiable oil, oil concentrate, or tank mix herbicide(s) after this product is thoroughly suspended.
8. Finish filling tank.

When an adjuvant is to be used with this product, ADAMA suggests the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant. When mixing with other products, observe the most restrictive precautions, use restrictions, and other limitations on the labels for all products involved.

## COMPATIBILITY

**Compatibility:** To determine the compatibility of Acephate 97 WDG with other products, the following procedure should be followed: Pour the recommended proportions of the products into a suitable container of water, mix thoroughly and allow to stand at least five (5) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible. For further information, contact your local ADAMA representative.

## RESTRICTIONS

- For use on turf, use is limited to sod farms and golf courses, except when applying to mound or spot treatments for fire ant and harvester ant control.
- Not for indoor residential use.
- For greenhouse use, use is limited to commercial greenhouses for use on tobacco (floatbed), ornamental, floral, and foliage plants. Do not use low pressure hand wand application equipment except when applying as a fire ant mound treatment or on ornamental trees, shrubs, and floral plants when grown for non-commercial use.
- Use on succulent green beans as a food crop is prohibited (includes string beans, snap beans, and wax beans). Succulent green bean use is permitted ONLY if grown for seed.

### BEANS AND LIMA BEANS

**(Crop Group 6) Dry and Succulent Forms (except succulent green beans which includes string beans, snap beans, and wax beans and succulent green beans grown only for seed.)**

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Fleahoppers, Grasshoppers	1/4 to 1/2 lbs. (4.0 to 8.0 oz.)	Apply in water at a minimum of 20 to 100 gals. spray per acre by ground or 2 gals. spray per acre by air.  Apply when eggs or insects first appear.  For severe insect infestations, use higher listed rates.
Aphids (excluding Black bean Aphid), Bean Leaf Beetle, Bean Leafroller, Cabbage Looper, Cutworms, Green Cloverworm, Leafhoppers, Mexican Bean Beetle, Plant Bugs (Lygus), Soybean Looper, Thrips, Whitefly (Except Sweetpotato/Silverleaf Whitefly)	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	
Armyworms (excluding Beet Armyworm), Corn Earworm, European Corn Borer	3/4 to 1.0 lb. (12.0 to 16.0 oz.)	

#### Use Restrictions

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle.
- For repeat applications use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Allow 1 day between application and harvest on lima beans (succulent form) and 14 days between application and harvest on snap-beans (dry beans).
- Do not feed treated vines to livestock.

Use in succulent green beans as a food crop is prohibited (including string beans and wax beans). Use in succulent green beans is permitted only if grown for seed.

#### RESTRICTIONS FOR SUCCULENT GREEN BEANS GROWN FOR SEED

- Do not feed crop residues to livestock or allow animals to graze 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.



## CELERY

### (Crop Group 4B)

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Green Peach Aphid	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	Apply in water at 50 to 100 gals. spray per acre by ground or in a minimum of 5 gals. per acre by air. Apply when eggs or insects appear.
Fall Armyworms, Cabbage Looper	1.0 lb. (16.0 oz.)	
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle.</li> <li>For repeat applications use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.</li> <li>Preharvest interval is 21 days.</li> <li>All celery must be trimmed (tops removed) before shipment for use.</li> <li>Do not use trimmed tops for food or feed.</li> </ul>		

## COLE CROPS

### (Brussels Sprouts and Cauliflower)

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Green Peach Aphid	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	Apply in water at 25 to 150 gals. spray per acre by ground or a minimum of 5 gals. spray per acre by air. Use the higher rate when heavy infestations of aphids are present. Begin application when insects or eggs first appear. <b>Diamondback Moth Larvae:</b> This insect has demonstrated an ability to develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current recommended control practices for this insect.
Cabbage Looper, Diamondback Moth Larvae, Imported Cabbage Worm	1.0 lb. (16.0 oz.)	
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle.</li> <li>For repeat applications use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.</li> <li>Preharvest interval is 14 days.</li> <li>Do not feed trimmings to livestock or allow animals to graze in treated areas.</li> </ul>		

## COTTON

### RESTRICTIONS FOR ALL COTTON USES:

- Do not apply more than 4 1/8 lb. (4 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, foliar, and seed treatment.
- For foliar treatment repeat applications, use a minimum spray interval of 7 days.
- For in-furrow treatments, make only one application per season.
- Do not feed treated forage or gin trash to livestock.
- Do not allow animals to graze on treated areas.
- For aerial application on cotton, do not apply more than 1.0 lb. ACEPHATE 97 WDG/acre in California and Arizona, and 0.75 lb. ACEPHATE 97 WDG/acre for all other areas of the U.S. per treatment.

## RESISTANCE MANAGEMENT

Cotton pest control programs, especially those for control of Sweetpotato/Silverleaf Whitefly populations, should 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.

### COMMERCIALY TREATED COTTONSEED

**APPLICATION INSTRUCTIONS:** ACEPHATE 97 WDG contains a water-soluble systemic insecticide which helps to reduce injury to cotton seedlings by several insects. ACEPHATE 97 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.

INSECTS	AMOUNT ACEPHATE 97 WDG PER 100 LBS. COTTONSEED	EFFICACY
Cotton Aphids Thrips (including Western Flower Thrips)	0.28 - 0.4 lb. (4.5 - 6.4 oz.) Note: lower rate not approved for use in California	Gives effective reduction of thrips and cotton aphids for up to three weeks after planting
Black (Greasy) Cutworm	0.28 - 0.4 lb. (4.5 - 6.4 oz.) Note: lower rate not approved for use in California	Gives effective reduction of Black (Greasy) Cutworm from planting through the 3 <sup>rd</sup> to 4 <sup>th</sup> leaf stage of development. When planting into fields where large cutworms are present (5 <sup>th</sup> instar and larger), economic damage may occur.

#### Use Restrictions

- 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 animals.
- Not for use on agricultural establishments in hopper-box, planter-box, slurry-box or other seed treatment applications at, or immediately before, planting.
- Do not apply more than 4 1/8 lb. (4 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, seed treatment, and foliar.
- Treated seed must not be used for, or mixed with, food or animal feed, or processed for oil.
- Observe all precautions and limitations on labeling of all products used in mixtures.
- 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 soil-incorporate spilled treated seeds.
- Treated seeds must be planted into the soil at the depth of 1 inch or greater.

#### Seed Container Label Requirements

Seed commercially treated with ACEPHATE 97 WDG Seed Treatment must be labeled in compliance with 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 insecticide.
- Do not use for food, feed or oil purposes.
- User is responsible for ensuring that the seed container label is in compliance with all of the requirements of the Federal Seed Act.

In addition, the EPA requires all bags containing treated seed must be labeled or tagged with the following information:

- This seed has been treated with ACEPHATE 97 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.
- 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 soil-incorporate spilled treated seeds.
- Treated seeds must be planted into the soil at the depth of 1 inch or greater.

**Notes:**

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

**COTTON IN-FURROW APPLICATION**

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Aphid* Thrips Black (Greasy) Cutworm (Except CA) *Excluding Cotton Aphids in AZ & CA	1/2 to 1.0 lb. (8.0 to 16.0 oz.)  NOTE: for the Blacklands of Texas use 1.0 lb. per acre ACEPHATE 97 WDG	Apply ACEPHATE 97 WDG in 3 to 5 gals. of water per acre as an in- furrow spray. ACEPHATE 97 WDG can be mixed with fungicides that are sprayed in-furrow for disease control. Flat-fan nozzles used for in-furrow application should be set so that the fanned spray pattern is aligned with the row to insure good spray deposition in the seed furrow. Cone type nozzles may not provide a spray pattern that insures maximum spray deposition in the seed furrow, and should be avoided. Spray systems that employ metal or plastic tubing for delivery of spray solution into the seed furrow should have tubing securely fastened to the furrow opener and should be checked frequently to insure that the tubing is properly positioned to deposit spray solution into the seed furrow.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>• Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.</li> <li>• For in-furrow treatments, make only one application per season.</li> <li>• Preharvest interval is 21 days.</li> <li>• Do not use treated seed for food/feed purposes or processed for oil.</li> </ul>		

### COTTON FOLIAR APPLICATION

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
	<b>For all applications:</b> Apply in water at 10 to 25 gals. spray per acre by ground or 3 to 10 gals. spray per acre by air (minimum 5 gals. per acre in CA and AZ). Apply when eggs or insects first appear.	
Thrips	2.5 to 3.0 oz.	Apply when eggs or insects first appear.
Plant Bugs (Lygus)	1/4 to 1.0 lb. 3/4 to 1.0 lb. (CA & AZ)	Apply when eggs or insects first appear. Use higher listed rate for lygus adults that have migrated into cotton.
Fleahopper	1/4 lb. (4.0 oz.)	Apply when eggs or insects first appear.
Cotton Aphid (excluding AZ and CA)	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	This insect may develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current control recommendations.
Whitefly (excluding Sweetpotato/Silverleaf Whitefly)	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	
Armyworms (excluding Beet Armyworm), Cabbage Looper	1.0 lb. (16.0 oz.)	Apply when eggs appear.
Bollworm Tobacco Budworm Adults Larvae Eggs (DEADHATCH®)	East of Rockies: 1/2 to 1.0 lb. (8.0 to 16.0 oz.) 1.0 lb. (CA & AZ)	Early season light infestation use 1/2 lb. product per acre. Mid and late season moderate to severe infestations use 3/4 to 1.0 lbs. per acre. Apply when eggs appear. Moths are controlled when they come in direct contact with spray particles during application. Moth kill is most likely to occur when application is made late in the evenings during periods of peak activity. DEADHATCH: Control of emerging larvae by consumption of treated egg casings. Use 1/4 to 1/2 lb. per acre.
Stinkbugs	3/4 lb. (12.0 oz.)	Apply when eggs appear.
Pink Bollworm (AZ & CA)	1.0 lb. (16.0 oz.)	Apply when insects appear.

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cutworms	3/4 lb. (12.0 oz.)	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.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>For aerial application on cotton, do not apply more than 1.0 lb. ACEPHATE 97 WDG/acre in California and Arizona, and 0.75 lb. ACEPHATE 97 WDG/acre for all other areas of the U.S. per treatment.</li> <li>Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.</li> <li>For foliar treatment repeat applications, use a minimum spray interval of 7 days.</li> <li>For in-furrow treatments, make only one application per season.</li> <li>Preharvest interval is 21 days.</li> <li>Do not feed treated forage or gin trash to livestock.</li> <li>Do not allow animals to graze on treated areas.</li> </ul>		

**COTTON TANK MIXES RESTRICTIONS TO FOLLOW WITH ALL FOLIAR TANK MIX PARTNERS:**

- Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.
- For repeat applications, use a minimum spray interval of 7 days.
- Do not feed gin trash or treated forage to livestock.
- Do not allow livestock to graze on treated areas.

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.

INSECTS	AMOUNT ACEPHATE 97 WDG + TANK MIX PARTNER PER ACRE	ADDITIONAL USE INSTRUCTIONS
Sweetpotato/ Silverleaf Whitefly	1/2 to 1.0 lb. (8.0 to 16.0 oz.) ACEPHATE 97 WDG + 8.0 to 16.0 fl. oz. DANITOL® 2.4 EC	Comply with all applicable directions, restrictions, and precautions on the EPA registered label for DANITOL 2.4 EC spray. Use a minimum application rate of 10 2/3 fl. oz. DANITOL 2.4 EC in CA and AZ. Apply when insects first appear or when damage is first noted and repeat application as necessary to maintain control.

INSECTS	AMOUNT ACEPHATE 97 WDG + TANK MIX PARTNER PER ACRE	ADDITIONAL USE INSTRUCTIONS
Armyworms (excluding Beet Armyworm), Bollworms, Cabbage Looper, Cotton Aphid, Cutworms*, Fleahopper, Grasshoppers, Pink Bollworm, Plant Bugs (Lygus, Mirids), Salt Marsh Caterpillar, Thrips, Tobacco Budworm, Whitefly (excluding Sweetpotato/Silverleaf Whitefly)	1/4 to 1.0 lb. (4.0 to 16.0 oz.) ACEPHATE 97 WDG + 1.0 to 2.0 pts. VULCAN	Apply in water at 10 to 25 gals. spray per acre by ground or 3 to 10 gals. spray per acre by air (minimum 5 gals. per acre in CA). 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 plant. Aerial applications are less effective, but may be used. Comply with all applicable directions, restrictions, and precautions on the EPA registered label for VULCAN. <b>*Cutworms:</b> Use 3/4 lb. per acre of ACEPHATE 97 WDG. Apply when insects first appear or when damage is first noted and repeat application as necessary to maintain control.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>For aerial application on cotton, do not apply more than 1.0 lb. ACEPHATE 97 WDG/acre in California and Arizona, and 0.75 lb. ACEPHATE 97 WDG/acre for all other areas of the U.S. per treatment.</li> <li>Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.</li> <li>Use a minimum spray interval of 7 days.</li> <li>Preharvest interval is 21 days.</li> </ul>		

#### COTTON TANK MIXES WITH PYRETHROIDS (FOLIAR)

Synthetic Pyrethroids should be used 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.

INSECTS	ACEPHATE 97 WDG AND TANK MIX PARTNER	AMOUNT OF ACEPHATE 97 WDG + TANK MIX PARTNER PER ACRE	ADDITIONAL USE INSTRUCTIONS
Aphids, Bollworm, Cabbage Looper, Cotton Leaf Perforator, Cutworms, Fall Armyworm, Fleahoppers, Pink Bollworm (AZ&CA),	ACEPHATE 97 WDG + one of the following	1/2 to 1.0 lb. (8.0 to 16.0 oz.) + one of the following	Apply in water at 10 to 25 gals. spray per acre by ground, or 3 to 10 gals. spray per acre by air (minimum 5 gals. per acre in CA). Ground application is recommended. Control is most effective when ground applications are made in the evenings and sprays are directed toward the base and lower portion of plant.

INSECTS	ACEPHATE 97 WDG AND TANK MIX PARTNER	AMOUNT OF ACEPHATE 97 WDG + TANK MIX PARTNER PER ACRE	ADDITIONAL USE INSTRUCTIONS
Plantbugs, Stinkbugs, Sweetpotato/ Silverleaf Whitefly, Thrips, Tobacco Budworm, Whitefly	CYPERMETHRIN 2.5 EC	Refer to the CYPERMETHRIN 2.5 EC approved label for use instructions.	Aerial applications are less effective, but may be used.
	ASANA® XL	Refer to the ASANA XL approved label for use instructions.	Apply when eggs or insects first appear or damage is first noted.
	BAYTHROID® 2 EC	Refer to the BAYTHROID 2 EC approved label for use instructions.	<b>Stinkbugs:</b> Use 3/4 lb. per acre of ACEPHATE 97 WDG
	FANFARE EC	Refer to the FANFARE EC approved label for use instructions	<b>Cutworms:</b> Use 3/4 lb. per acre of ACEPHATE 97 WDG
	SILENCER VXN	Refer to the SILENCER VXN approved label for use instructions	

**Use Restrictions**

- For aerial application on cotton, do not apply more than 1.0 lb. ACEPHATE 97 WDG/acre in California and Arizona, and 0.75 lb. ACEPHATE 97 WDG/acre for all other areas of the U.S. per treatment.
- Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.
- Use a minimum spray interval of 7 days.
- Preharvest interval is 21 days.

**CRANBERRIES (FOLIAR)**

**(Crop Group 13-07 A)**

INSECTS	AMOUNT ACEPHATE 97WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cranberry Blossom Worm, Gypsy Moth, False Armyworm Fireworms, Spanworms, Sparganothis	1.0 lb. (16.0 oz.)	Apply in water by air, ground or with sprinkler irrigation systems. Use sufficient water to give thorough coverage with ground or sprinkler equipment. Use a minimum of 2 gals. spray per acre by air.

**Use Restrictions**

- Do not apply more than 1.0 lb. (1.0 lb. ai) ACEPHATE 97 WDG per acre per crop cycle.
- Do not make more than one application per growing season.
- Preharvest interval is 75 days for MA, NJ, WA, and WI; and 90 days for other states.
- Do not apply from start of bloom until all berries set.

**SPRINKLER IRRIGATION APPLICATION TO CRANBERRIES:** 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, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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 should 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, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also 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, which 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.

**Solid Set Systems:** 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 insure 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. See information below.

**Center Pivot Systems:** Inject the specified dosage per acre continuously for one complete revolution of the system. See information below.

**Information:** 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 angle turn to insure adequate mixing.

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

#### HEAD LETTUCE (Crisphead type only)

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Aster Leafhopper Green Peach Aphid	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	Apply in water at 10 to 60 gals. of spray per acre (broadcast) by ground or 5 gals. of spray per acre by air.
Cabbage Looper Armyworms (excluding Beet Armyworm)	1.0 lb. (16.0 oz.)	Applications may be made in spring, summer, and early fall in all areas and winter applications may be made in AZ, CA, FL, and TX; and late fall applications may be made in Arizona.
Use Restrictions		
<ul style="list-style-type: none"><li>Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) ACEPHATE 97 WDG per acre per crop cycle.</li><li>For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.</li><li>Preharvest interval is 21 days.</li><li>Do not apply after first head begins to form in crops that germinate from mid-September through November in desert areas of AZ and CA.</li><li>Do not feed trimmings to livestock or allow animals to graze on treated areas.</li></ul>		



### MINT Spearmint and Peppermint

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Alfalfa Looper, Aphids, Cutworms, Strawberry Root Weevil Adult, Black Vine Weevil Adult	1.0 lb. (16.0 oz.)	Foliar application. Apply in water at 20 to 100 gals. spray per acre by ground or 5 to 10 gals. spray per acre by air. Apply when eggs or insects first appear. <b>Strawberry Root and Black Vine Weevil:</b> For control, apply in water in a minimum of 40 gals. spray per acre by ground. Good spray coverage and canopy spray penetration is critical for control. Increase spray volume and pressure with tall or dense mint canopy. Apply after adult emergence is complete but prior to egg laying. Apply at dusk or during the night on a warm still evening.
Use Restrictions <ul style="list-style-type: none"> <li>• Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) ACEPHATE 97 WDG per acre per crop cycle.</li> <li>• Maximum 2 applications per crop season.</li> <li>• Use a minimum spray interval of 7 days.</li> <li>• Preharvest interval is 14 days.</li> <li>• Do not use spent mint hay for feed for animals.</li> <li>• Do not graze treated areas.</li> </ul>		

### NON-BEARING CITRUS

(including newly planted groves & citrus nursery seedlings) – Agricultural settings ONLY

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Aphids, Grasshoppers, Katydid, Mealybugs Orangedogs, Plant Bugs, Thrips, Whiteflies (except Sweetpotato/Silverleaf Whitefly)	1/2 lb. (8.0 oz.)	<b>All Applications:</b> Apply in water at 100 to 200 gals. of water per acre by ground application. <b>All Applications:</b> Spray individual juvenile or non-bearing trees for coverage with total application not exceed specified rate in lbs. per acre. Length of residual activity will depend upon spray coverage and the amount of moisture following application.
Citrus Blackfly*	1/2 to 3/4 lb. (8.0 to 12.0 oz.)	Apply when eggs or adult insects first appear. Use the high rate when a heavy infestation is present. Repeat application after 3 days for rates up to 0.52 lb. product/A (0.5 lb. a.i./A) and repeat application after 7 days for rates greater than 0.52 lb. product/A (0.5 lb a.i./A) to maintain control.
Ants (Excluding Fire, Harvester*, Carpenter, and Pharaoh Ants)	Foliar spray 3/4 lb. (12.0 oz.)	Repeat application after 7 days if necessary to maintain control.

<b>INSECTS</b>	<b>AMOUNT ACEPHATE 97 WDG PER ACRE</b>	<b>ADDITIONAL USE INSTRUCTIONS</b>
Ants (Excluding Carpenter and Pharaoh)*	Soil Mound Treatment Drench Method 3/4 oz./5 gals.	Apply 1 gal. of mix to each mound area by sprinkling the mound until it is wet and treat a four (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.

Use Restrictions

- Use a minimum spray interval of 7 days.
- Do not graze treated areas.
- Do not harvest citrus for one year (365 days) after treatment.

\*Not registered for use in California for control of Citrus Blackfly or Harvester Ants.

**NON-CROP AREAS  
FIELD BORDERS, FENCEROWS, ROADSIDES, DITCHBANKS, BORROW PITS**

<b>INSECTS</b>	<b>AMOUNT ACEPHATE 97 WDG PER ACRE</b>	<b>ADDITIONAL USE INSTRUCTIONS</b>
Grasshoppers	1/4 lb. (4.0 oz.).	Apply in water at 10 to 20 gals. spray per acre by ground or 1 to 5 gals. spray per acre by air (minimum 5 gals. per acre in CA). For early to mid-season application. Use the higher volumes when spraying dense foliage. An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.

Use Restrictions

- Do not graze or feed vegetation cut from treated areas.

**NON CROP AREAS (FIELD BORDERS, FENCEROWS, ROADSIDES, DITCHBANKS, BORROW PITS)**

<b>INSECTS</b>	<b>AMOUNT ACEPHATE 97 WDG PER ACRE SPRAY PER ACRE</b>	<b>ADDITIONAL USE INSTRUCTIONS</b>
Ants, Fire Ants and Harvester Ants* Only	Drench Method: Mix 3/4 oz. in 5 gals. of water. Apply 1 gal. of mix to each mound area by sprinkling the mound until it is wet and treat a four (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.

Use Restrictions

- Do not treat mound more than once per season.
- Do not graze animals.
- Do not feed treated grass/hay to dairy animals.
- Do not apply if lactating dairy cattle are present.
- Meat animals should be removed from treated areas at least 1 day before slaughter if they were present at application or grazed treated areas within 21 days of application.

\*Not registered for use in California for control of Harvester Ants.

**NURSERY STOCK: NON-BEARING DECIDUOUS FRUIT TREES, NUT TREES AND  
VINES IN NURSERY FIELD OR NON-BEARING ORCHARDS**

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Nursery stock (non-bearing Deciduous Fruit Trees, Nut Trees, Vines), Almond, Apricot, Apple, Cherry, Grape, Kiwi, Pear, Pistachio, Plum, Prune, Walnut	Aphids Plant bugs (Lygus) Thrips	0.5 to 1 lb. (8 to 16 oz.)	Ground Application: Apply in 50 to 100 gallons of water per acre in conventional equipment to ensure thorough coverage of the target plants. Aerial Application: Apply in a minimum of 5 gallons of water per acre. Use sufficient carrier volume to provide thorough coverage. Repeat application after 3 days for rates up to 0.52 lb. product/A (0.5lb. a.i./A) and repeat application after 7 days for rates greater than 0.52 lb. product/A (0.5 lb a.i./A) to maintain control. Use higher rates within the specified range for severe insect infestations.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>• For application only to non-bearing trees or vines in nursery fields or in non-bearing orchards.</li> <li>• Do not apply to interplants or single trees in a bearing orchard.</li> <li>• Do not harvest any fruit from sprayed trees for one year after application.</li> <li>• Do not allow livestock to graze treated area.</li> <li>• Do not exceed 1 lb/product/A.</li> </ul>			

**WASTELAND (NON-FOOD/NON-FEED PRODUCING AREAS)**

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Black Grass Bugs, Grasshoppers, Mormon Crickets	1.5 to 2.0 oz.	Apply in water at 10 to 20 gals. spray per acre by ground or 0.5 gal. spray per acre by air (minimum of 5 gals. per acre in CA). Use the higher volumes when spraying dense foliage. An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>• Do not graze or feed vegetation cut from treated areas.</li> <li>• Do not make more than one application per season.</li> </ul>		

### PEANUTS FOLIAR APPLICATION

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Grasshoppers	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	<p><b>For All Applications:</b> Apply in water at 10 to 50 gals. spray per acre by ground or in 5 to 10 gals. spray per acre by air.</p> <p>Apply when eggs or insects first appear.</p> <p>ACEPHATE 97 WDG can be tank mixed with at-cracking and early post emergence peanut herbicides, provided those products do not prohibit tank mixes, provided the most restrictive of label limitations and precautions are observed, and provided no label dosage rates are exceeded.</p> <p>To determine physical compatibility, pour the listed proportions of each chemical with the same proportion of water as will be present in the chemical supply tank into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is considered physically compatible. When mixing wettable powder or dry flowable formulations, add and disperse these first, then add liquid pesticides. Conduct another compatibility test at concentrations, which will be present in the irrigation lines. If there is any separation, which cannot be remixed readily, ADAMA, recommends that the combination not be used.</p> <p>Combinations should be kept agitated and should be applied immediately. Do not allow combinations to set for prolonged periods in the chemical supply tank or irrigation lines.</p>
Thrips	3/8 to 3/4 lb. (6.0 to 12.0 oz.)	
Corn Earworm, Fall Armyworm, Leafhoppers, Loopers, Velvetbean Caterpillar	3/4 to 1.0 lb. (12.0 to 16.0 oz.)	

**Use Restrictions**

- Do not apply more than 4 1/8 lbs. (4.0 lb. ai) of ACEPHATE 97 WDG per acre per crop cycle.
- Do not apply more than 4.0 lb. ai, this includes the use on peanuts as a foliar spray in addition to the peanut planter box seed treatment use.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 14 days.
- Do not feed treated forage or hay to livestock.
- Do not allow animals to graze treated areas.

### BELL PEPPERS

**(Crop Group 8-10 B)**

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Grasshoppers	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	<p>Apply in water at or 25 to 150 gals. spray per acre by ground or 3 gals. spray per acre (minimum 5 gals. spray per acre in CA) by air.</p> <p>Apply when eggs or insects appear.</p>
Cabbage Looper, Green Peach Aphid, Tobacco Hornworm	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	
European Corn Borer	3/4 to 1.0 lb. (12.0 to 16.0 oz.)	

**Use Restrictions**

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) ACEPHATE 97 WDG per acre per crop cycle.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 7 days.

**NON-BELL PEPPERS**

(For Use in Midwestern, Eastern States, and Puerto Rico Only)

**(Crop Grop 8-10 C)**

<b>INSECTS</b>	<b>AMOUNT ACEPHATE 97 WDG PER ACRE</b>	<b>ADDITIONAL USE INSTRUCTIONS</b>
Aphids	1/2 lb. (8.0 oz.)	Apply in water at 40 to 150 gals. spray per acre with ground equipment.
Use Restrictions <ul style="list-style-type: none"> <li>Do not apply more than 1.0 lb. (1.0 lb. ai) of ACEPHATE 97 WDG per acre per crop cycle.</li> <li>Use a minimum spray interval of 3 days.</li> <li>Preharvest interval is 7 days</li> </ul>		

**SOYBEANS**

<b>INSECTS</b>	<b>AMOUNT ACEPHATE 97 WDG PER ACRE</b>	<b>ADDITIONAL USE INSTRUCTIONS</b>
Grasshopper, Thrips	1/4 to 1/2 lbs.	For Foliar Application apply in in 10 to 50 gals. spray per acre by ground or 5 to 10 gals. spray per acre by air.
Potato Leafhopper, Stinkbugs	1/2 to 1.0 lb.	
Armyworms (except Beet), Bean leaf beetle, Cabbage looper, Green cloverworm, Mexican bean beetle, Soybean aphid, Threecornered alfalfa hopper, Velvetbean caterpillar	3/4 to 1.0 lb.	
Use Restrictions <ul style="list-style-type: none"> <li>Do not apply more than 1.5 lbs (1.5 lbs. ai) of Acephate 97 WDG per acre per crop cycle.</li> <li>For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.</li> <li>Preharvest interval is 14 days.</li> <li>Do not graze or cut vines for hay or forage.</li> </ul>		

## TOBACCO

(NOT REGISTERED FOR USE IN CALIFORNIA)

GREENHOUSE TOBACCO FLOATBED APPLICATIONS (except California)

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cutworm, Flea Beetle, Green Peach Aphid, Tobacco Aphid	3/4 lb. (12.0 oz.)	Apply to foliage at the equivalent of 1 tablespoon in 3 gal. of water per every 1,000 sq. ft. of bed. Apply evenly to ensure through coverage. Dispose of Floatbed water in the transplant field through the transplant water or through foliar spray.
Use Restrictions		
<ul style="list-style-type: none"><li>Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.</li><li>Use a minimum spray interval of 7 days.</li><li>Preharvest interval is 3 days.</li></ul>		

### TOBACCO PLANT BED APPLICATIONS (except California)

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cutworm, Flea Beetle, Green Peach Aphid, Tobacco Aphid	3/4 lb. (12.0 oz.)	Apply to foliage at the equivalent of 1 tablespoon in 1 gal. of water per every 1,000 sq. ft. of bed. Apply evenly to ensure thorough coverage.
Use Restrictions		
<ul style="list-style-type: none"><li>Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.</li><li>Use a minimum spray interval of 7 days.</li></ul>		

### TOBACCO TRANSPLANT WATER APPLICATION (except California)

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

INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cutworms, Flea Beetle, Green Peach Aphid, Potato Tuberworm, Tobacco Aphid, Tobacco Thrips	3/4 lb. (12.0 oz.)	Apply in a minimum of 100 gals. of transplant water per acre. Should be pre-mixed in water to form a slurry solution prior to adding to the transplant water tank. Provides control of early season flea beetles, green peach aphid, tobacco aphid, and cutworm for approximately 3 to 4 weeks after transplanting. For later season control of these insects, apply a foliar spray of ACEPHATE 97 WDG. Do not apply more than 3/4 lb. of ACEPHATE 97 WDG per acre as a transplant-water application as some phytotoxicity may occur. 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.
Use Restrictions		
<ul style="list-style-type: none"><li>Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.</li></ul>		

**TOBACCO FOLIAR APPLICATION** (except California)

<b>INSECTS</b>	<b>AMOUNT ACEPHATE 97 WDG PER ACRE</b>	<b>ADDITIONAL USE INSTRUCTIONS</b>
Grasshoppers	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	Apply in 10 to 50 gals. water per acre with ground equipment or a minimum of 3 gals. per acre by air.
Flea Beetle, Green Peach Aphid, Tobacco Hornworm, Tobacco Thrips	1/2 lb. (8.0 oz.)	
Stinkbugs, Tobacco Aphid, Vegetable Weevils	1/2 to 3/4 lb. (8.0 to 12.0 oz.)	
Budworm, Cabbage Looper, Cutworm, Japanese Beetle	3/4 lb. (12.0 oz.)	
Use Restrictions		
<ul style="list-style-type: none"> <li>Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of ACEPHATE 97 WDG per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.</li> <li>For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.</li> <li>Preharvest interval is 3 days.</li> </ul>		

**TOBACCO SOIL APPLICATION** (except California)

<b>INSECTS</b>	<b>AMOUNT ACEPHATE 97 WDG PER ACRE</b>	<b>ADDITIONAL USE INSTRUCTIONS</b>
Ants (excluding carpenter, fire, harvester and pharaoh ants)	Drench Method: Mix 3/4 oz. in 5 gals. of water. Apply 1 gal. of mix to each mound area by sprinkling the mound until it is wet and treat a four (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.
Use Restrictions		
<ul style="list-style-type: none"> <li>Do not apply more than 4 1/8 lbs. (4 lbs. ai) per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.</li> <li>Treat maximum of 13 mounds per acre.</li> <li>Do not treat more than once per season.</li> <li>Preharvest interval is 3 days</li> </ul>		

### CONTAINER GROWN NURSERY STOCK

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Container Grown Nursery Stock (Arborvitae, Azalea, Camellia, Rhododendron, Roses, Viburnum, Yew)	Black Vine Weevil Strawberry Root Weevil	3/4 lb. (12.0 oz.)	Application should be made by of 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 ACEPHATE 97 WDG per 100 gals. of solution so as to thoroughly drench the root system.
	Ants (excluding fire, harvester, carpenter, and pharaoh ants)	3/4 lb. (12.0 oz.)	Apply as needed to control the pest.	
Use Restrictions <ul style="list-style-type: none"> <li>• Do not apply more than 3/4 lb. product per acre.</li> <li>• Use a minimum spray interval of 7 days.</li> <li>• Do not apply with low pressure hand wand.</li> </ul>				

### ORNAMENTAL TREES AND SHRUBS

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Trees and Shrubs (except Flowering Crabapple see below)	Aphids, Bagworms, Birch, Leafminer, Tent Caterpillar*, Lace Bugs, Leafrollers	1/4 lb. (4.0 oz.)	As the insects begin to appear.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. water with a hydraulic sprayer. The addition of a suitable sticker improves control of Gypsy Moth larvae. * Mist blower application. Adjust rates to 1.0 lb. per 100 gals. water for Gypsy Moth control and 3/4 lb. per 100 gals. water for Tent Caterpillar control.
	Douglas Fir Tussock Moth Larvae, Gypsy Moth Larvae* Webworms	1/2 lb. (8.0 oz.)	As the insects begin to appear.	
	Scales (Crawler)	1/2 lb. (8.0 oz.)	As crawlers begin to appear. Repeat applications at a 2 week or more interval. May be necessary where there is continuous crawler production.	



PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Trees and Shrubs (except Flowering Crabapple see below)	Ponderosa Pine Needle Miner	1/2 lb. (8.0 oz.)	Time of application is important. Consult your Farm advisor or County Extension Agent.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. water with a hydraulic sprayer as a full coverage spray.
	Grasshoppers	1/2 lb. (8.0 oz.)	As the grasshoppers begin to appear.	
	California Oakworm Cankerworms (Spring and Fall)	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	As the insects begin to appear. Use the higher amount when the larger larvae are present.	
	Nantucket Pine Tip Moth Larvae	3/4 lb. (12.0 oz)	Time of application is important. Consult your Farm Advisor or County Extension Agent. Repeat applications will be required for subsequent generations.	
	Root Weevil Adults	3/4 lb. (12.0 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.	
	Box Elder Bugs, Sawflies, Budworms, Leafhoppers	3/4 lb. (12.0 oz)	As the insects begin to appear.	
	Japanese Beetle	1.0 lb. (16.0 oz.)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	
	Elm Leaf Beetle (larvae)	1.0 lb. (16.0 oz.)	As the larvae begin to appear. ACEPHATE 97 WDG will not prevent Elm Leaf Beetle eggs from hatching.	

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Douglas Fir	Douglas Fir Needle Midge	1/2 lb. (8.0 oz.) (1/2 lb. per acre)	Application should be made no more than 2 weeks prior to bud burst. For additional pest management information, consult your county extension service.	Apply the specified amount of ACEPHATE 97 WDG in not less than in 100 gals of spray per acre by ground or 2 gals. of spray per acre by air. Do not make more than one application per season.
Flowering Crabapples	Aphids, Tent Caterpillars, Leafrollers	1/4 lb. (4.0 oz)	As the insects begin to appear. Do not apply more often than 3 times in a growing season at a 4 week interval. Do not apply more than 1/4 lb. product per acre/100 gallons of water.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. water with a hydraulic sprayer. Phytotoxicity has occurred on the following Crabapple varieties: Hops, Ichonoski, Malusfloribunda, Pink Perfection, Red Wine and Snow Cloud.
Crepe Myrtle	Aphids	2.0 to 3.0 level tsp. (0.6 to 0.8 oz.) per tbsp. water as paint on*	As aphids begin to appear.	
*Make a point-on slurry by mixing the specified amount of ACEPHATE 97 WDG with 6 to 8 tablespoons of water. Remove the loose bark from the trunk areas to be treated. Completely paint a band around each trunk to a width twice its diameter. Application should be made 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, application should be made as low as possible within the recommended treatment zone.				
Use Restrictions				
<ul style="list-style-type: none"> <li>• Do not apply to Huckleberry, Balm of Gilead, Cottonwood, Lombardy Poplar, and Viburnum suspensum</li> <li>• Nursery crops: Before treating large plantings, spray only a few plant and observe two weeks for Phytotoxicity</li> <li>• Do not apply more than 1.0 lb. product per acre per 100 gallons of water.</li> <li>• Do not apply more than 3 times in a growing season to trees and shrubs.</li> <li>• Apply at a minimum of 2 week intervals unless otherwise indicated</li> <li>• Do not apply with low pressure hand wand</li> </ul>				

### GOLF COURSE TURF GRASS

INSECTS	AMOUNT ACEPHATE 97 WDG PER 1,000 SQ. FT. Golf Course	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Fall Armyworm, Yellow Striped Armyworm, Southern Armyworm	0.4 to 0.9 oz. (1.1 to 2.5 lbs. per acre)	As the insects appear. Repeat application at 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 WDG per 1,000 sq. ft. Use a minimum of 5 gals. water per 1,000 sq. ft. to obtain good coverage. Use higher rates within the specified range for severe insect infestations
Cutworm	0.9 to 1.5 oz. (2.5 to 4.12 lbs. per acre)		
Chinch bugs	0.9 to 1.5 oz. (2.5 to 4.12 lbs. per acre)	Apply as needed for adult population knockdown. Repeat application at 10 to 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 WDG per 1,000 sq. ft. Use 1 to 15 gals. water per 1,000 sq. ft. to obtain good coverage. Use higher rates within the specified range for severe insect infestations.
Sod Webworm (Crambus ssp.)	0.4 to 0.8 oz. (1.0 to 2.2 lbs. per acre)	As sod webworms begin to appear. Use the higher amount when quick knockdown is needed or with heavy infestations. Repeat application at 7 to 14 day intervals as needed.	
Leafhopper	0.75 oz. (2.0 lbs. per acre)	As the leafhoppers begin to appear. Repeat application at 7 day intervals as needed.	
Mole Crickets* (Except CA) Spittlebug (Except CA)	0.8 to 1.4 oz. (2.2 to 4.0 lbs. per 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. Repeat applications at 7 to 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 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. Do not irrigate after application. Use higher rates within the specified range for severe insect infestations.
*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. The following lemon-scented products have been shown to be effective flushing agents: Lemon Joy, Lemon Palmolive, and Mighty Myrt Products Manufacture- Base pure lemon fragrance. The use rate for these lemon-scented products is 2 teaspoons per gallon of water for small total mix volume or 6 fl. oz. per 50 gals. of water for large mix volume.			

INSECTS	AMOUNT ACEPHATE 97 WDG PER 1,000 SQ. FT.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
	Golf Course		
Greenbug (Schizaphis graminum) Grasshoppers	0.4 oz. (1.0 lbs. per acre)	Apply when insects or their damage first appears. Repeat application at 7 to 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 WDG. Use 4 gals. of water per 1,000 sq. ft. to obtain good coverage. Do not mow for at least 24 hours after application.
Black Turfgrass Ataenius (Except CA)	0.9 to 1.4 oz. (2.5 to 4.0 lbs. per acre)	Apply when insects or their damage first appear. Repeat application at 7 to 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 WDG per 1,000 sq. ft. Use a minimum of 5 gallons water per 1,000 sq ft. Irrigate lightly after application (not more than 1/2 inch). Use the higher listed rate for severe infestations. Use higher rates within the specified range for severe insect infestations.
In sites with Dichandra as a desirable ground cover: Cutworm Flea Beetle Southern Armyworm Yellow Striped Armyworm	0.8 to 1.4 oz. (2.2 to 4 lbs. per acre)	Apply when the insects appear. Repeat at 14 day intervals as necessary	Apply the specified amount of ACEPHATE 97 WDG per 1,000 sq. ft. Use a minimum of 5 gallons water per 1,000 sq ft. Irrigate lightly after application (not more than 1/2 inch). Use the higher listed rate for severe infestations. Use higher rates within the specified range for severe insect infestations.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>• Maximum Application Rate for Golf Course Turf: 4.12 lbs. product/A.</li> <li>• Preharvest interval is 3 days.</li> <li>• Aerial applications are prohibited.</li> <li>• Do not allow livestock to graze.</li> <li>• Do not feed treated grass to livestock.</li> </ul> <p>Do not allow livestock to graze treated areas. Do not feed treated grass to livestock. Use is limited to sod farms and golf courses, except when applying by mound or spot treatment for fire ant and harvester ant control. Aerial application to turf is prohibited.</p>			

**SOD FARM TURFGRASS**

INSECTS	AMOUNT ACEPHATE 97 WDG	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
	Sod Farm Turfgrass		
Fall Armyworm, Yellow Striped Armyworm, Southern Armyworm	0.4 to 0.9 oz. (1.1 to 2.5 lbs. per acre)	As the insects appear. Repeat application at 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 WDG per 1,000 sq. ft. Use a minimum of 5 gals. water per 1,000 sq. ft. to obtain good coverage. Use higher rates within the specified range for severe insect infestations
Cutworm	0.9 to 1.1 oz. (2.5 to 3.09 lbs. per acre)		
Chinch bugs	0.9 to 1.1 oz. (2.5 to 3.09 lbs. per acre)	Apply as needed for adult population knockdown. Repeat application at 10 to 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 WDG per 1,000 sq. ft. Use 1 to 15 gals. water per 1,000 sq. ft. to obtain good coverage.
Sod Webworm (Crambus spp.)	0.4 to 0.8 oz. (1.0 to 2.2 lbs. per acre)	As sod webworms begin to appear. Use the higher amount when quick knockdown is needed or with heavy infestations. Repeat application at 7 to 14 day intervals as needed.	Use higher rates within the specified range for severe insect infestations.
Leafhopper	0.75 oz. (2.0 lbs. per acre)	As the leafhoppers begin to appear. Repeat application at 14 day intervals as needed.	
Mole Crickets* (Except CA) Spittlebug (Except CA)	0.8 to 1.1 oz. (2.2 to 3.09 lbs. per 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. Repeat applications at 10 to 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 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. Do not irrigate after application. Use higher rates within the specified range for severe insect infestations.

\*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. The following lemon-scented products have been shown to be effective flushing agents: Lemon Joy, Lemon Palmolive, and Mighty Myrt Products Manufacture- Base pure lemon fragrance. The use rate for these lemon-scented products is 2 teaspoons per gallon of water for small total mix volume or 6 fl. oz. per 50 gals. of water for large mix volume.

INSECTS	AMOUNT ACEPHATE 97 WDG	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
	Sod Farm Turfgrass		
Greenbug (Schizaphis graminum) Grasshoppers	0.4 oz. (1.0 lbs. per acre)	Apply when insects or their damage first appears. Repeat application at 14 day intervals as needed.	Apply the specified amount of ACEPHATE 97 WDG. Use 4 gals. of water per 1,000 sq. ft. to obtain good coverage. Do not mow turfgrass for at least 24 hours after application.
In sites with Dichondra as a desirable ground cover: Cutworm, Flea Beetle, Southern Armyworm, Yellow Striped Armyworm	0.8 to 1.1 oz. (2.2 to 3.09 lbs. per acre)	Apply when the insects appear. Repeat at 14 day intervals as necessary	Apply the specified amount of ACEPHATE 97 WDG per 1,000 sq. ft. Use a minimum of 5 gallons water per 1,000 sq ft. Irrigate lightly after application (not more than 1/2 inch). Use the higher listed rate for severe infestations. Use higher rates within the specified range for severe insect infestations.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>• Maximum Application Rate for Sod/Turf: 3.09 lbs. product/A.</li> <li>• Preharvest interval is 3 days.</li> <li>• Aerial applications are prohibited.</li> <li>• Do not allow livestock to graze treated areas.</li> <li>• Do not feed treated grass to livestock.</li> </ul> <p>Do not allow livestock to graze treated areas. Do not feed treated grass to livestock. Use is limited to sod farms and golf courses, except when applying by mound or spot treatment for fire ant and harvester ant control. Aerial application to turf is prohibited.</p>			

### MOUND TREATMENT OF FIRE ANTS AND HARVESTER ANTS IN TURFGRASS

PLANT	INSECTS	AMOUNT ACEPHATE 97 WDG	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Turfgrass Residential, Recreational and Commercial Turf	Fire Ants and Harvester Ants (Only)	Drench Method: Mix 3/4 oz. in 5 gals. of water. Apply 1 gal. of mix to each mound area by sprinkling the mound until it is wet and treat a four (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.	Apply the specified amount of ACEPHATE 97 WDG as directed. Grass in treated area may be injured.

**Use Restrictions**

- Use as a mound treatment only: only for use on fire ants and harvester ants. Not registered for use in California for control of Harvester Ants.
- Do not treat mound more than once per season.
- Preharvest interval is 3 days
- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.

### OUTDOOR AND PERIMETER SPRAY EXCLUDING RESIDENTIAL TURF

LOCATION	INSECTS	AMOUNT ACEPHATE 97 WDG PER GALLON	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Outdoor and perimeter area excluding residential turf	Wasps	1.2 oz.	Treat early or late in the day as wasps are generally less active during these times.	Apply the specified amount of ACEPHATE 97 WDG per each gallon of water used. Apply as a spot treatment to the nest, nest entrance, and surrounding areas where the wasps alight.
	Ants (excluding fire, harvester, carpenter, and pharaoh ants) Crickets, Cockroaches, Earwigs, Pillbugs	1.2 oz.	As the insects appear.	Apply specified amount of ACEPHATE 97 WDG per each gallon of water used. Apply to a band of soil 6 to 10 feet adjacent to the structure and to a height of 2 to 3 feet on the foundation where pests may be active or may find entrance. Also apply as a residual spray or with a paint brush to surfaces of buildings, window frames, shutters, entry-ways, screens, eaves, patios, garages, carports, around garbage areas and other areas where these pests congregate.

**Use Restrictions**

- The use of low pressure handwand equipment for perimeter or wasp treatments is prohibited.
- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.
- Not for use on residential turf grass

### OUTDOOR FLORAL CROPS AND GROUND COVERS

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Chrysanthemums, Daisies, Dahlias, Gladioli, Gyposophila, Lilies: including Easter Lily, Calla Lily, Pachysandra, Peony, Roses, Sedum, Statice, Strawflower, Yarrow, Zinnia	Aphids Thrips Lygus	1/2 lb. (8.0 oz.)	As insects begin to appear. Repeat applications at 2 week intervals may be necessary.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. 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 few plants to determine varietal susceptibility.
Roses	Japanese Beetles	3/4lb. (12.0 oz.)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>Do not apply more than 12 oz. product per acre per 100 gallons of water.</li> <li>Do not apply with low pressure hand wand.</li> <li>Do not use on cut flowers.</li> <li>Do not apply more often than once every 28 days to chrysanthemums.</li> </ul>				

### OUTDOOR FLORAL CROPS -CUT FLOWERS

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Chrysanthemum, Daisies, Dahlias, Gladioli, Gyposophila, Lilies: including Easter Lily, Calla Lily, Pachysandra, Peony, Roses, Sedum, Statice, Strawflower, Yarrow, Zinnia	Aphids Thrips Lygus	1/2 lb. (8.0 oz.)	As insects begin to appear. Repeat applications at 2 week intervals may be necessary.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. 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 few plants to determine varietal susceptibility.
Roses	Japanese Beetles	3/4lb. (12.0 oz.)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>Do not apply more than 0.77 lb. product per acre (3/4 lb. a.i. per acre) to cut flowers.</li> <li>Do not apply with low pressure hand wand.</li> <li>Do not apply more often than once every 28 days to chrysanthemums.</li> </ul>				



**COMMERCIAL GREENHOUSE FLORAL AND FOLIAGE PLANT CROPS**

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Roses	Leafrollers	1/2 to 3/4 lb. (8.0 to 12.0 oz.)	As leafrollers begin to appear. Use the higher amount when large larvae are present.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. water with a hydraulic sprayer as a full coverage spray. Application to roses in flower may result in flower damage.
Foliage Plants Anthuriums, Cacti, Orchids, Poinsettia	Aphids	1/4 lb. (4.0 oz.)	As aphids begin to appear.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. water with a hydraulic sprayer as a full coverage spray. The addition of a wetting agent may be required on difficult to wet foliage.
	Mealybugs Thrips Whiteflies	1/2 lb. (8.0 oz.)	As the insects begin to appear. A repeat application at a 2 week interval may be necessary for control of mealybugs and whiteflies.	Caution: Phytotoxicity has occurred on the following foliage plants: Bletchum gibbum, Cissus antarctica, Ficus triangularis, Fittonia verschaffeltii, Maranta leuconeura kerchoveana, Plectranthus lutes, Plectranthus australis, Polypodium aureus, Polystichum. Pteris ensiformis, Tolmiea menziesii. Before treating large plantings spray only a few plants and observe 2 weeks for varietal phytotoxicity.
	Scales (Crawlers)	1/2 lb. (8.0 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 of ACEPHATE 97 WDG on Poinsettias after bract formation may result in phytotoxicity on certain varieties.
Foliage Plants Anthuriums, Cacti, Orchids, Poinsettia	Sweetpotato/ Silverleaf Whiteflies (Except CA)	1/4 lb. (4.0 oz.) plus TAME® 2.4 EC 10 2/3 fl. oz. (0.2 lb. ai)	Apply when insects first appear. If a population is well established, make one application of the tank mix and follow 5 to 7 days later with TAME alone at 16 fl. oz./100gal. See TAME label for instructions.	For Sweetpotato/ Silverleaf whitefly control, apply the specified amount of ACEPHATE 97 WDG plus TAME 2.4 EC. Spray as a tank mix at a volume necessary to obtain good coverage. Follow the TAME label for specific instructions on the alternation of TAME plus ACEPHATE 97 WDG and TAME alone and the rotation instruction to avoid potential resistance.

PLANTS	INSECTS	AMOUNT ACEPHATE 97 WDG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Roses Carnations Chrysanthemums	Aphids Thrips	1/2 lb. (8.0 oz.)	As aphids begin to appear. As thrips begin to appear or at the tight flower bud stage. Repeat applications may be necessary.	Apply the specified amount of ACEPHATE 97 WDG in 100 gals. water with a hydraulic sprayer as a full coverage spray. Application to Chrysanthemums and Roses with open flowers may result in flower damage. Caution: Phytotoxicity has occurred on the following Chrysanthemum varieties: Alb.atross. Bonnie Jean, Dixie, Garland. Gent, Iceberg. Pride, Showoff. Statesman, Tally Ho, Westward Ho, and Wild Honey. Before treating large Chrysanthemum plantings, spray only a few plants and observe two weeks for varietal phytotoxicity.
<p>Use Restrictions</p> <ul style="list-style-type: none"> <li>Do not apply more than 3/4 lb. product per acre per 100 gallons of water to roses</li> <li>Do not apply more than 1/2 lb. product per acre per 100 gallons of water for anthuriums, Cacti, Foliage Plants, Orchids, Poinsettia, Carnations, Chrysanthemums, and Roses.</li> <li>Do not apply more than 1/4 lb. product per acre per 100 gallons of water for Silverleaf Whitefly and Sweet potato Whitefly.</li> <li>Retreatment interval is 14 days for Roses and 28 days for Carnations and Chrysanthemums.</li> <li>Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.</li> <li>Do not apply with low pressure hand wand.</li> </ul>				

#### **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

# STORAGE AND DISPOSAL

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

## **PESTICIDE STORAGE:**

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area.

Do not store above 100°F for extended periods of time. Storage below 20°F can result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

## **PESTICIDE DISPOSAL:**

Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

## **CONTAINER HANDLING:**

### **NONREFILLABLE CONTAINERS:**

#### **Rigid, Nonrefillable containers small enough to shake (i.e. with capacities equal to less than five gallons).**

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

### **RECYCLE OR DISPOSAL OF CONTAINERS:**

End users are authorized to remove tamper evident cable as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. Instructions for container rinsing and either recycling or disposal are as follows:

#### **Bottom Discharge IBC (e.g. Schuetz Caged IBC or Snyder Square Stackable).**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

#### **Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums and Kegs).**

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

## LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ADAMA makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ADAMA is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ADAMA disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ADAMA's election, the replacement of product.

ASANA® - Registered trademark of Sumitomo Chemical Co., Ltd.

BAYTHROID® -- Registered trademark of Bayer Crop Protection

DANITOL® - Registered trademark of Sumitomo Chemical Co., Ltd.

KARATE® - Registered trademark of Syngenta Crop Protection, Inc.

SILENCER® - Registered trademark of an ADAMA Group Company

TAME® -- Registered trademark of Valent USA Corporation

Manufactured for:

Makhteshim Agan of North America, Inc.

(d/b/a ADAMA)

3120 Highwoods Blvd., Suite 100

Raleigh, NC 27604

080217-1.0

# Acephate 97 WDG

## Agricultural & Fire Ant Insecticide

For Use on beans, celery, cole crops, cotton, cranberries, mint, non-bearing citrus, non-crop areas, peanuts, peppers, soybeans, tobacco, container nursery stock, ornamental trees and shrubs, golf course and sod farm turfgrass, outdoor floral crops and ground covers, and greenhouse floral and foliage crops.

### ACTIVE INGREDIENT: % BY WT.

Acephate (0,5-Dimethyl acetylphosphoramidothioate) ..... 97.0%

OTHER INGREDIENTS: ..... 3.0%

TOTAL ..... 100.0%

Acephate 97 WDG is a granular insecticide.

EPA Reg. No. 66222-266 EPA Est. No. 084049-CHN-001

## KEEP OUT OF REACH OF CHILDREN CAUTION/ PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

For additional Precautionary Statements, First Aid, and Directions for Use, see inside of this booklet.

## How can we help? 1-866-406-6262

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INSECTICIDE

Net Contents  
**10 pounds**

**ADAMA**  
ESSENTIALS

GROUP 1B INSECTICIDE

### FIRST AID

Contains an organophosphate that inhibits cholinesterase

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. 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 to 20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**Note to Physician:** Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine in antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

For emergency medical treatment information, call ProSAR 24 hours a day at 1-877-250-9291.

In case of spills, fire, leaks or accidents call 1-800-535-5053.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area.

Do not store above 100°F for extended periods of time. Storage below 20°F can result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING: NONREFILLABLE CONTAINERS: Rigid, Nonrefillable containers small enough to shake (i.e. with capacities equal to less than five gallons).** Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

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PEEL BACK BOOK HERE