

19713-400

05-15-2012

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



OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MAY 15 2012

Luz Chan
Drexel Chemical Company
1700 Channel Avenue
P.O. Box 13327
Memphis, TN 38113

Dear Ms. Chan,

Subject: Label amendment to delete green beans per mitigation letter dated 1/4/2012
Drexel Acephate 75 WSP
EPA Reg. No. 19713-400
Submission dated: 1/13/2012

The labeling referred to above submitted in connection with the Federal Insecticide, Fungicide and Rodenticide Act is acceptable.

Per 40 CFR 156.10(a)(6), submit one copy of your final printed labeling before you release the product for shipment. As defined in 40 CFR 152.3, "final printed labeling" means the "label or labeling of the product when distributed or sold." Clearly legible reproductions or photo reductions will be accepted for unusual labels. Note that a clean copy of the master label in most cases does not meet the definition of final printed labeling.

A stamped copy of the labeling is enclosed for your records. If you have any questions, please contact Autumn Metzger at (703) 305-5314 or metzger.autumn@epa.gov.

Regards,

A handwritten signature in black ink that reads "Venus Eagle". The signature is fluid and cursive, with a long horizontal line extending to the right.

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

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Master Label For EPA Reg. No. 19713-400

- Sub-Label 1 (pp. 2- 24):
Drexel Acephate 75 WSP (In water soluble bag)
- Sub-Label 2 (pp. 25 - 29):
Drexel Acephate 75 SP (For hopper box and ant treatment uses)

ACCEPTED

MAY 15 2012

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

EPA. Reg. No: 19713-400

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SUB-LABEL 1

GROUP 1B INSECTICIDE

Drexel

Acephate 75 WSP

Insecticide in a Water Soluble Pak

ACTIVE INGREDIENT:

Acephate..... 75.0%

OTHER INGREDIENTS:..... 25.0%

TOTAL: 100.0%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See FIRST AID Below

EPA Reg. No. 19713-400
EPA Est. No. 19713-XX-XXX

Net Content: 1 LB.

FIRST AID

Acephate is 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 by mouth to an unconscious or convulsing 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

NOTE TO PHYSICIAN: This material contains a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure but decisions regarding treatment will usually need to be made before test results are available. If signs and symptoms of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM is also antidotal and may be administered in conjunction with atropine but should not be used alone.

400SP-0512*P

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PRECAUTIONARY STATEMENTS

Hazards To Humans and Domestic Animals

CAUTION: Harmful if swallowed. Avoid contact with eyes, skin or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils or neoprene ≥ 14 mils. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators and other handlers using engineering controls must wear: Long-sleeved shirt and long pants, chemical-resistant gloves and shoes plus socks.

In addition, applicators using low pressure hand wand application equipment must wear: A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter.

See Engineering Control statements for additional requirements.

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

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

Mixers and loaders using water soluble packets must:

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

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

The use of human flaggers is prohibited.

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds. 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 or soil incorporate spills.

This product and its degradate are highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

DIRECTIONS FOR USE

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

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

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

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AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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), restricted entry interval (REI) and notification to workers. The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 24 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water, is: Coveralls, chemical-resistant gloves made of any waterproof material and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

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

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

WATER SOLUBLE PACKAGING

Multiple Packaging: This bag contains multiple water soluble packets of this product. Do not handle the packets with wet gloves or allow the packets to become wet prior to addition to spray tank. Do not break open packets. Refer to the Tables of Equivalents to calculate the number of packets to use. If all packets are not used, close and reseal outer container to protect remaining packet(s).

Single Packaging: This bag contains one water soluble packet of this product. Do not handle the packet with wet gloves or allow the packet to become wet prior to addition to spray tank. Do not break open packet. Refer to the Tables of Equivalents to calculate the number of packets to use. Open outer bag and drop the unopened inner packet of this product into spray tank.

Preparation of Spray Solution: To prepare spray solution, drop the unopened packet(s) of this product into a spray tank containing at least one half the total quantity of water required. Direct water at the floating packet(s) and continue to add water with the agitator running until the spray volume is reached. Do not add any liquid fertilizers, micronutrients or adjuvants to the spray solution until after the packet and its contents have completely dissolved. Water soluble packet(s) should completely dissolve in approximately five minutes. Dissolution rate may be slowed by cold water, lack of agitation or water containing high concentrations of boron or sulfur.

TABLE OF EQUIVALENTS

Amount of This Product	1.33 lbs.	1 lb.	0.66 lb.	4 ozs.	2 ozs.
Amount of A.I. Contained	1 lb.	0.75 lb.	0.5 lb.	0.2 lb.	0.1 lb.

TABLE OF EQUIVALENTS FOR 1 POUND PACKET

Rate of This Product Per Acre	Acres Treated by a 1 Lb. Packet
4 oz.	4
0.3 lb.	3
0.66 lb.	1.5
1 lb.	1
1.3 lbs.	0.75
2.6 lbs.	0.38
6.6 lbs.	0.15

USE INFORMATION

ACEPHATE 75 WSP is an insecticide for control of pests on selected agricultural crops and in certain non-crop areas. The active ingredient in this product is acephate, a water-soluble insecticide, readily absorbed by plant roots and foliage to give systemic control of feeding insects. Insect pests are generally controlled more effectively by this product through ingestion than by contact. To maintain control, application of this product may be repeated only as directed.

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

USE RESTRICTIONS

- For use on turf, use is limited to sod farms and golf courses, except when applying to mound or spot treatment for fire ant and harvester ant control.
- Do not apply with low pressure handwand as specified on the label.
- Not for indoor residential use.
- For greenhouse use, use is limited to commercial greenhouses for use on ornamental, floral, foliage plants and tobacco (floatbed application).

RESISTANCE MANAGEMENT

GROUP	1B	INSECTICIDE
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ACEPHATE 75 WSP contains a Group 1B insecticide. Insect biotypes with acquired resistance to Group 1B may eventually dominate the insect population if Group 1B insecticides 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 this product or other Group 1B insecticides.

To delay insecticide resistance, consider:

- Avoiding the consecutive use of this product or other Group 1B insecticides/acaricides that have similar target site of action on the same insect/mite species.
- Using tank mixtures or premixes with insecticides/acaricides from a different target site 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 specific site and resistant pest problems.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions, (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.

- All aerial, ground and air-assisted/airblast application equipment must be properly maintained and calibrated using water as carrier. Do not apply this product as an ultralow volume (ULV) spray, or in any carrier other than water.
- Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Do not apply at wind speeds greater than 10 mph at the application site.
- Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage.
- For aerial applications, do not apply at heights greater than 10 feet (consistent with flight safety).
- For airblast applications, direct spray above foliage and turn off outward pointing nozzles at row ends and outer rows.
- For aerial applications, the spray boom should be mounted on the aircraft as to minimize drift caused by wind tip vortices. The minimum boom length should be used and must not exceed 75% of wind span or rotor diameter.
- For ground applications, do not apply at heights greater than 4 feet.

CHEMIGATION

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.

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Apply to Cranberries only by sprinkler irrigation systems, including central pivot, lateral move, end tow, side (wheel), roll, travelers, big gun, solid, set or hand move. Do not apply this product by chemigation to any other crop, or through any other type of irrigation system.

TANK MIXES

Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of the user, applicator and/or the application advisor.

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

BEANS AND LIMA BEANS (Dry and Succulent Forms*)

USE RESTRICTIONS

- *Use on succulent green beans (includes string beans, snap beans and wax beans) is prohibited.
- Do not exceed 2.66 lbs. (2 lbs. a.i.) per acre per crop cycle.
- For repeat applications, the minimum spray interval is 7 days.
- Do not feed treated vines to livestock.

Insect Pest	This Product Per Acre	Days to Harvest
Fleahoppers, Grasshoppers	0.33 to 0.66 lb.	14 (Dry beans)
Aphids (excluding Black bean aphids), Bean leaf beetles, Bean leafrollers, Cabbage loopers, Cutworms, Green cloverworms, Leafhoppers, Mexican bean beetles, Plantbugs (Lygus), Soybean loopers, Thrips, Whiteflies (except Sweet Potato or Silver Leaf)	0.66 to 1.33 lbs.	1 (Lima beans - succulent)
Armyworms (excluding beet armyworm), Corn earworms, European corn borers	1 to 1.33 lbs.	

Additional Use Instructions:

- Application method - Foliar: By Ground - 20 to 100 gals. of spray per acre; By Air - minimum of 2 gals. of spray per acre
- Apply when eggs or insects first appear.
- For severe insect infestations, use the higher listed rates.

BRUSSEL SPROUTS / CAULIFLOWER

USE RESTRICTIONS

- Do not apply more than 2.66 lbs. (2 lbs. a.i.) per acre per crop cycle.
- For repeat applications, the minimum spray interval is 7 days.
- Do not feed trimmings to livestock or allow animals to graze in treated areas.

Insect Pest	This Product Per Acre	Days to Harvest
Green peach aphids	0.66 to 1.33 lbs.	14
Cabbage loopers, Diamondback moth larvae, Imported cabbage worms	1.33 lbs.	

Additional Use Instructions:

- Application method - Foliar: By Ground - 25 to 100 gals. of spray per acre; By Air - minimum of 5 gals. of spray per acre.
- Use the higher listed rate when heavy infestations of Aphids are present.
- Begin applications when eggs or insects first appear.
- **Diamondback Moth Larvae:** This insect has demonstrated an ability to develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current control practices for this insect.

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CELERY

USE RESTRICTIONS

- Do not apply more than 2.66 lbs. (2 lbs. a.i.) per acre per crop cycle.
- All celery must be trimmed (tops removed) before shipment for use.
- Do not use trimmed (tops) for food or feed.
- For repeat applications, the minimum spray interval is 7 days.

Insect Pest	This Product Per Acre	Days to Harvest
Green peach aphids	0.66 to 1.33 lbs.	21
Cabbage loopers, Fall armyworms	1.33 lbs.	

Additional Use Instructions:

- Application method - Foliar: By Ground - 50 to 100 gals. of spray per acre; By Air - minimum of 5 gals. of spray per acre.
- Apply when eggs or insects appear.

COTTON

USE RESTRICTIONS

- Do not use treated seed for food or feed purposes or process for oil.
- Do not feed gin trash or treated forage to livestock.
- Do not allow animals to graze on treated areas.
- The maximum allowable seasonal application rate for each method of application on cotton is specified under "Additional Use Restriction(s)" below. The maximum total seasonal application rate for all methods of application on cotton combined is 5.3 lbs. (4 lbs. a.i.) per acre.
- For repeat applications, the minimum spray interval is 7 days.

Cotton At Planting In-Furrow Application

Insect Pest	This Product Per Acre	Days to Harvest
Aphids (Excluding Cotton Aphids in AZ & CA), Black (Greasy) cutworm (Except CA), Thrips (including Western flower thrips)	0.66 to 1.33 lbs. 1.33 lbs. (Blacklands of TX)	-

Additional Use Instructions:

- Application method -In-Furrow: By Ground - minimum 3 to 5 gals. of spray per acre.
- Use flat fan nozzle to ensure good spray deposition into the seed furrow.
- Do not use cone type nozzles due to unacceptable spray deposition.
- Securely fasten spray system stubbing to furrow opener and check frequently to ensure proper positioning and operation.
- Mix with fungicides that are sprayed in-furrow for disease control.

Additional Use Restriction for Cotton At Planting In-Furrow Application:

- Do not apply more than 1.33 lbs. (1 lb. a.i.) per acre per season.

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Cotton Foliar Application

Insect Pest	This Product Per Acre		Days to Harvest
	By Ground	By Air	
Thrips (including Western flower thrips)	3 to 4 ozs.	3 to 4 ozs.	21
Plantbugs (Lygus) ¹	East of the Rockies: 0.33 to 1.33 lbs CA, AZ: 1 to 1.33 lbs.	East of the Rockies: 0.33 to 1 lb. CA, AZ: 1 to 1.33 lbs.	
Fleahoppers	0.33 lb.	0.33 lb.	
Cotton aphids ² [excluding AZ, CA]	0.66 to 1.33 lbs.	0.66 to 1.33 lbs.	
Whiteflies (excluding silverleaf whitefly/sweet potato whitefly)	0.66 to 1.33 lbs.	East of the Rockies: 0.66 to 1 lb. CA, AZ: 0.66 to 1.33 lbs.	
Armyworms (excluding Beet armyworms), Cabbage loopers	1.33 lbs.	East of the Rockies: 1 lb. CA, AZ: 1.33 lbs.	
Bollworms, Tobacco budworms ³ (Adults, Larvae ⁴)	East of the Rockies: 0.66 to 1.33 lbs.	East of the Rockies: 0.66 to 1lb.	
Eggs/Deadhatch ⁵	CA, AZ: 1.33 lbs.	CA, AZ: 1.33 lbs.	
Stinkbugs, Cutworms ⁶	1 lb.	1 lb.	
AZ & CA: Pink bollworms	1.33 lbs.	1.33 lbs.	

Additional Use Instructions:

- Application method - Foliar: By Ground - 10 to 25 gals. of spray per acre; By Air - minimum 3 to 10 gals. of spray per acre (minimum of 5 gals. of spray per acre by air in AZ and CA).
- Apply when eggs or insects first appear.

1 Lygus – Use the higher listed rate for Lygus adults that have migrated into Cotton.

2 Cotton aphids – This insect has shown the ability to develop resistance to various classes of insecticides in various locations at various times during the production season. Consult your Local Agricultural Extension Service for the current recommended control practices for this insect.

3 Bollworms and Tobacco budworms – For early season light infestation, use 0.66 lb. per acre. For mid-and late-season moderate to severe infestations, use 1 to 1.33 lbs. per acre. Apply when eggs appear.

4 Adults/Larvae – Moths of budworms are controlled when they come in direct contact with spray pesticides during application. Moth kill is most likely to occur when application is made late in the evenings during periods of peak activity.

5 Eggs – When spray pesticides come in direct contact with eggs, hatching larvae may be controlled as they consume and emerge from their egg casing.

6 Cutworms – Control is most effective when ground applications are made in the evenings and the spray is directed toward the lower portion and base of the plant. Apply in water at 10 to 25 gals. of spray per acre by ground. Aerial applications are less effective in controlling Cutworms but may be used. Apply when insects first appear or damage is first noted.

Additional Use Restrictions for Cotton Foliar Application:

- Do not apply more than 5.3 lbs. (4 lbs. a.i.) per acre per season.
- For aerial application, do not apply more than 1.33 lbs. of this product per acre per application to cotton grown in AZ and CA. To cotton grown in all other states, do not apply more than 1 lb. of this product per acre per application.

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Cotton Tank Mixes

Always read and follow all label directions when using this product in tank mix combinations. Take all restrictions and precautions which appear on all product labels. The most restrictive labeling applies when using a tank mix.

This Product Plus Chlorpyrifos 4E-AG

Insect Pest	This Product + Chlorpyrifos 4E-AG Per Acre		Days to Harvest
	By Ground	By Air	
Armyworms (excluding Beet armyworms), Bollworms, Cabbage loopers, Cotton aphids, Cutworms*, Fleahoppers, Grasshoppers, Pink bollworms, Plant bugs (Lygus, Mirids), Salt marsh caterpillars, Thrips, Tobacco budworms, Whiteflies (excluding Sweet potato whiteflies)	0.33 to 1.33 lbs. + 1 to 2 pts.	East of the Rockies: 0.33 to 1 lb. + 1 to 2 pts CA, AZ: 0.33 to 1.33 lbs. + 1 to 2 pts.	21

Additional Use Instructions When This Product is Tank Mixed with Chlorpyrifos 4E-AG:

- Application method - Foliar: By Ground - 10 to 25 gals. of spray per acre; By Air - minimum 3 to 10 gals. of spray per acre (minimum of 5 gals. of spray per acre by air in AZ and CA).
- Apply when eggs or insects first appear or when damage is first noted.
- *For Cutworms - Use 1 lb. of this product per acre. Control is most effective when ground applications are made in the evenings and the spray is directed toward the lower portion and base of the plant. Aerial applications are less effective in controlling Cutworms but may be used.
- Comply with all applicable directions, restrictions and precautions on the EPA registered label for Chlorpyrifos 4E-AG.

This Product Plus Danitol® 2.4 EC

Insect Pest	This Product + Danitol® 2.4 EC Per Acre	Days to Harvest
Sweetpotato /Silverleaf Whitefly	0.66 lbs. + 10.6 to 16 fl. ozs.	21

Additional Use Instructions When This Product is Tank Mixed with Danitol 2.4 EC:

- Application method - Foliar: By Ground - 10 to 25 gals. of spray per acre; By Air - minimum 3 to 10 gals. of spray per acre (minimum of 5 gals. of spray per acre by air in AZ and CA).
- Comply with all applicable directions, restrictions and precautions on the EPA registered label for Danitol 2.4 EC.

This Product Plus Synthetic Pyrethroids

Insect Pest	This Product + Synthetic Pyrethroid Per Acre	Days to Harvest
Aphids, Bollworm, Cabbage looper, Cotton leaf perforator, Cutworms*, Fall armyworm, Fleahoppers, Pink bollworm (AZ & CA), Plantbugs, Stinkbugs*, Sweetpotato/Silverleaf whitefly, Thrips (including Western flower thrips), Tobacco budworm, Whitefly	0.66 to 1.33 lbs. + Label specified rate of one of the following: Ambush® 2EC Asana® XL Baythroid® 2EC Bifenthrin 2EC Capture® 2EC Cymbush® 3EC Cypermethrin 2.5 EC Karate® 1 EC (Except CA) Pounce® 3.2 EC Scout® X-Tra	21 (26 with Scout® X-Tra)

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Additional Use Instructions When This Product is Tank Mixed With Synthetic Pyrethroid:

- Application method - Foliar: By Ground - 10 to 25 gals. of spray per acre; By Air - minimum 3 to 10 gals. of spray per acre (minimum of 5 gals. of spray per acre by air in AZ and CA).
- Apply when eggs or insects first appear or when damage is first noted.
- *For Stinkbugs - Use 1 lb. of this product per acre.
- *For Cutworms - Use 1 lb. of this product per acre. Control is most effective when ground applications are made in the evenings and the spray is directed toward the lower portion and base of the plant. Aerial applications are less effective in controlling Cutworms but may be used.
- Use synthetic pyrethroids within the guidelines of State and or Regional Resistance Management programs and recommendations.

CRANBERRIES

USE RESTRICTIONS

- Do not make more than one application per growing season.
- Do not apply more than 1.33 lbs. (1 lb. a.i.) per acre per season.
- Do not apply from start of bloom until all berries set.

Insect Pest	This Product Per Acre	Days to Harvest
Cranberry blossom worms, Cranberry cutworms, False armyworms, Fireworms, Gypsy moths, Spanworms, Sparganothis	1.33 lbs.	90 75 (MA, NJ, WA, and WI)

Additional Use Instructions:

- Application methods - Foliar: By Ground - sufficient water to give thorough coverage; By Air - minimum of 2 gals. of spray per acre; By sprinkler irrigation - 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.

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 suppliers are in place.

A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch 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.

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

Solid Set System: Apply specified dosage for the entire length of the irrigation period or for a 30 to 60 minute period at the end of a regular irrigation set or as a 30 to 60 minute injection as a separate application not associated with a regular irrigation. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining pesticide, a dye indicator may be injected into the lines to mark the end of the application period.

Center Pivot Systems: Inject the specified dosage per acre continuously for one complete revolution of the system. Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Inject the product with a positive displacement pump into the main line ahead of a right turn to insure adequate mixing. Application of more than label recommended quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness.

LETTUCE (Crisphead Types Only)

USE RESTRICTIONS

- Do not apply after first head begins to form to crops which germinate from mid-September through November in desert areas of AZ and CA.
- Do not apply more than 2.66 lbs. per acre (2 lbs. a.i.) per season.
- For repeat applications, the minimum spray interval is 7 days.
- Do not feed trimmings to livestock or allow to graze on treated areas.

Insect Pest	This Product Per Acre	Days to Harvest
Aster leafhoppers, Green peach aphids	0.66 to 1.33 lbs.	21
Armyworms (excluding Beet armyworms), Cabbage loopers	1.33 lbs.	

Additional Use Instructions:

- Application method - Foliar: By Ground - 10 to 60 gals. of spray per acre; By Air - minimum 5 gals. of spray per acre.
- Applications may be made in Spring, Summer and early Fall in all areas. Winter applications may be made in AZ, CA, FL and TX. Late Fall applications may be made in AZ

NONBEARING CITRUS

USE RESTRICTIONS

- Do not graze treated areas.
- Do not harvest citrus for 1 year (365 days) after treatment.
- For repeat applications (foliar), the minimum spray interval is 7 days.

Insect Pest	This Product Per Acre	Days to Harvest
Aphids, Grasshoppers, Katydid, Mealybugs, Orange dogs, Plant bugs, Thrips, Whiteflies	0.66 lbs.	Do not harvest citrus for 1 year (365 days) after treatment
Citrus blackfly*	0.66 to 1 lb.	
Ants (including Imported fire ants and harvester ants)	1 lb.	

Additional Use Instructions:

- Application method - Foliar: By Ground - 100 to 200 gals. of spray per acre.
- *For citrus blackfly, apply when eggs or insects first appear. Use the higher listed rate when a heavy infestation is present.
- Spray Individual juvenile or nonbearing trees for coverage with total application not to exceed the specified rate in lbs. per acre. Length of residual activity will depend upon spray coverage and the amount of moisture following application.

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Insect Pest	This Product Per Acre	Days to Harvest
Fire ants (excluding Carpenter and Pharaoh ants)	Mound Treatment- Drench Method: Mix an equivalent of 1 oz. in 5 gal. of water.	Do not harvest citrus for 1 year (365 days) after treatment.

Additional Use Instructions:

- Application method - Drench Method.
- Apply 1 gal. of the mix to each mound area by sprinkling the mound until wet and treat a 4 feet 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.

NON-CROP AREAS

USE RESTRICTIONS

- Do not graze or feed vegetation cut from treated areas.
- Do not use on turf (except for golf course turf and spot or mound treatment for ant control).

Borrow Pits, Ditchbanks, Fencerows, Field Borders, Roadsides

Insect Pest	This Product Per Acre	Days to Harvest
Grasshoppers	0.33 lb.	-

Additional Use Instructions:

- Application method - Foliar: By Ground - 10 to 20 gals. of spray per acre; By Air - 1 to 5 gals. of spray per acre (minimum of 5 gals. per acre in CA).
- Apply in early to mid-season.
- Use the higher volume when spraying heavier foliage.
- An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.

Wasteland

Insect Pest	This Product Per Acre	Days to Harvest
Black Grass Bugs , Grasshoppers, Mormon Crickets	0.125 to 0.16 lb.	-

Additional Use Instructions:

- Application method - Foliar: By Ground - 10 to 20 gals. of spray per acre; By Air - 0.5 gal. of spray per acre (minimum of 5 gals. per acre in CA).
- Use the higher volume when spraying heavier foliage.
- An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.

Additional Use Restriction for Wasteland:

- Do not make more than one application per season.

Non-Crop Areas (Ant Mound Treatment)

Insect Pest	This Product	Days to Harvest
Ants (excluding Carpenter and Pharaoh ants)	Mound Treatment - Drench Method 1 oz. in 5 gals. of water	-

Additional Use Instructions:

- Application method - Drench Method.
- Apply 1 gal. of the mix to each mound area by sprinkling the mound until wet and treat 4 feet 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 areas may be injured.

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Additional Use Restrictions for Ant Mound Treatment:

- Do not treat ant mound more than once per season.
- Do not apply more than 13 mounds per acre per season.

PEANUTS

USE RESTRICTIONS

- The maximum total seasonal application rate for all methods of application on peanuts combined is 5.33 lbs. (4 lbs. a.i.) per acre.
- Do not feed treated forage or hay to livestock or allow animals to graze treated areas.
- For repeat applications, the minimum spray interval is 7 days.

Insect Pest	This Product Per Acre	Days to Harvest
Grasshoppers	0.33 to 0.66 lbs.	14 (of digging)
Thrips	0.5 to 1 lb.	
Corn earworms, Fall armyworms, Leafhoppers, Loopers, Velvetbean caterpillars	1 to 1.33 lbs.	

Additional Use Instructions:

- Application method - Foliar: By Ground - 10 to 20 gals. of spray per acre; By Air - 5 to 10 gals. of spray per acre.
- Begin applications when insects first appear.
- This product can be tank mixed with at-cracking and early post-emergence peanut herbicides provided those products do not prohibit tank mixes. Take all restrictions and precautions, which appear on all product labels. The most restrictive labeling applies when using a tank mix.

To determine physical compatibility, pour the recommended 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, do not use the combination. Keep the combinations agitated and apply immediately. Do not allow combinations to sit for prolonged periods in the chemical supply tank or irrigation lines.

PEPPERMINT/SPEARMINT

USE RESTRICTIONS

- Do not apply more than 2.66 lbs. (2 lbs. a.i.) per acre per season.
- Do not use spent mint hay for feed to animals.
- Do not graze treated areas.
- For repeat applications, the minimum spray interval is 7 days.

Insect Pest	This Product Per Acre	Days to Harvest
Alfalfa loopers, Aphis, Cutworms	1.33 lbs.	14

Additional Use Instructions:

- Application method - Foliar: By Ground - 20 to 100 gals. of spray per acre; By Air - 5 to 10 gals. of spray per acre.
- Apply when eggs or insects first appear.

Insect Pest	This Product Per Acre	Days to Harvest
Blackvine weevil (adult), Strawberry rootweevil (adult)	1.33 lbs.	14

Additional Use Instructions:

- Application method - Foliar: By Ground - 20 to 100 gals. of spray per acre.
- 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.

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PEPPER

USE RESTRICTIONS

- For Bell peppers, do not apply more than 2.66 lbs. per acre per crop cycle.
- For Non-bell peppers, do not apply more than 1.33 lbs. (1 lb. a.i.) per acre per season.
- For repeat applications, the minimum spray interval is 7 days.

Bell Peppers

Insect Pest	This Product Per Acre	Days to Harvest
Grasshoppers	0.33 to 0.66 lbs.	7
Cabbage loopers, Green peach aphid, Tobacco hornworm	0.66 to 1.33 lbs.	
European corn borer	1 to 1.33 lbs.	

Additional Use Instructions:

- Application method - Foliar; By Ground - 25 to 150 gals. of spray per acre; By Air - minimum 3 to 10 gals. of spray per acre (minimum of 5 gals. per acre in CA).
- Apply when eggs or insects first appear.

Non-Bell Peppers (Midwestern States, Eastern States & Puerto Rico Only)

Insect Pest	This Product Per Acre	Days to Harvest
Aphids	0.66 lb.	7

Additional Use Instruction:

- Application method - Foliar; By Ground - 40 to 150 gals. of spray per acre.

SOYBEANS (MS & TX Only)

USE RESTRICTIONS

- Do not apply more than 2 lbs. (1.5 lbs. a.i.) per acre per season.
- For repeat applications, the minimum spray interval is 7 days.
- Do not graze or cut vines for hay or forage.

Insect Pest	This Product Per Acre	Days to Harvest
Grasshoppers, Thrips	0.33 to 0.66 lbs.	14
Potato leafhopper, Stinkbugs	0.66 to 1.33 lbs.	
Armyworms (except Beet), Bean Leaf Beetle, Cabbage looper, Green cloverworm, Mexican bean beetle, Soybean aphid, Three-cornered Alfalfa hopper, Velvetbean caterpillar	1 to 1.33 lbs.	

Additional Use Instruction:

- Application method - Foliar; By Ground - 10 to 50 gals. of spray per acre; By Air - 5 to 10 gals. of spray per acre.

TOBACCO (Except CA)

USE RESTRICTIONS

- The maximum total seasonal application rate for all methods of application on tobacco combined is 5.33 lbs. (4 lbs. a.i.) per acre.

Tobacco Floatbed/Greenhouse Application

Insect Pest	This Product Per Acre	Days to Harvest
Cutworms, Flea beetles, Green peach aphids, Tobacco aphids	1 lb.	-

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Additional Use Instructions:

- Application method: Foliar.
- Apply to foliage at the equivalent of 1 tablespoon in 3 gals. of water per every 1,000 sq. ft. of bed.
- Apply evenly to insure thorough coverage.
- Dispose floatbed water in the transplanted field as transplanter water or foliar spray.

Additional Use Restrictions for Tobacco Floatbed/Greenhouse Application:

- For repeat applications, the minimum spray interval is 7 days.

Tobacco Foliar Application

Insect Pest	This Product Per Acre	Days to Harvest
Grasshoppers	0.33 to 0.66 lb.	3
Flea beetles, Green peach aphids, Hornworms, Tobacco thrips	0.66 lb.	
Stinkbugs, Tobacco aphids, Vegetable weevils	0.66 to 1 lb.	
Budworms, Cabbage loopers, Cutworms	1 lb.	

Additional Use Instructions:

- Application method: Foliar; By Ground - 10 to 50 gals. of spray per acre; By Air - minimum of 3 gals. of spray per acre.

Additional Use Restrictions for Tobacco Foliar Application:

- For repeat applications, the minimum spray interval is 7 days.

Tobacco Plantbed Application

Insect Pest	This Product Per Acre	Days to Harvest
Cutworms, Flea beetles, Green peach aphids, Tobacco aphids, Tobacco thrips	1 lb.	-

Additional Use Instructions:

- Application method - Foliar.
- Apply to foliage at the equivalent of 1 tablespoon per gal. of water per every 1,000 sq. ft. of bed.
- Apply evenly to ensure thorough coverage.

Additional Use Restrictions for Tobacco Plantbed Application:

- For repeat applications, the minimum spray interval is 7 days.

Tobacco Transplant Water Application

Insect Pest	This Product Per Acre	Days to Harvest
Cutworms, Flea beetles, Green peach aphids, Potato tuberworm, Tobacco aphids, Tobacco thrips	1 lb.	-

Additional Use Instructions:

- Application method - Transplant water application.
- Make transplant water applications using mechanical transplant equipment only.
- Provides control of the above pests for approximately 3 to 4 weeks after transplanting. For later season control of these insects, apply a foliar spray of this product.
- Apply in a minimum of 100 gals. of transplant water per acre.
- Do not apply more than 1 lb. of this product per acre as a transplant water application as some phytotoxicity may occur.

Additional Use Restriction for Tobacco Transplant Water Application:

- Do not apply more than once per season.

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Tobacco Soil Application (Ant Mound)

Insect Pest	This Product Per Acre	Days to Harvest
Ants (excluding Carpenter and Pharaoh ants)	Mound Treatment – Drench Method: Mix an equivalent of 1 oz. in 5 gals. of water.	3

Additional Use Instruction:

- Application method: Drench.
- Apply 1 gal. of mix to each mound area by sprinkling the mound unit until it is wet and treat a four feet diameter circle around the mound.
- For best results, apply 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.

Additional Use Restrictions for Tobacco Ant Mound Application:

- Treat a maximum of 13 mounds per acre per season.
- Do not treat more than once per season.

CONTAINER GROWN NURSERY STOCK

(Arborvitae, Azalea, Camellia, Rhododendron, Roses, Viburnum, Yew)

Insect Pest	This Product Per 100 Gals.	Time of Application	Application Instructions
Black vine weevil, Strawberry root weevil	1 lb. (16 ozs.)	Apply by mid-September for greenhouse stock and by mid-October for outdoor stock.	<ul style="list-style-type: none"> • Apply solution so as to thoroughly drench the root system. • Consult your local county extension agent for information on the identification and control of root weevils on ornamentals.
Ants (excluding Fire ants, Carpenter, Harvester and Pharaoh ants)	1 lb. (16 ozs.)	Apply as needed.	<ul style="list-style-type: none"> • Apply solution so as to thoroughly drench the root system.

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ORNAMENTAL TREES AND SHRUBS

USE RESTRICTIONS

- Do not apply using low pressure handwand equipment.

Trees and Shrubs (Except Flowering Crabapple and Douglas Fir)

Insect Pest	This Product Per 100 Gals.	Time of Application and Use Instructions	Additional Use Restriction
Aphids, Bagworms, Birch leafminer, Tent caterpillars*, Lace bugs, Leafrollers	0.33 to 0.66 lb. (5.3 to 10.6 ozs.)	<ul style="list-style-type: none"> • As insect pests or as crawlers begin to appear. • Apply with hydraulic sprayer. • Addition of a suitable sticker improves the control of Gypsy moth. • *Mistblower application: Adjust rates to 1.33 lbs. per 100 gals. of water for control of Gypsy moth control and 1 lb. per 100 gals. of water for control of Tent caterpillars. • Application to Huckleberry, Balm of Gilead, Cottonwood, Lombardy, Poplar and <i>Viburnum suspensum</i> is not advisable. • Nursery crops: Before treating large plantings, spray only a few plants and observe 2 weeks for phytotoxicity. • **Repeat applications may be necessary where there is continuous crawler production. 	<ul style="list-style-type: none"> • Do not apply more than 21.3 ozs. (1 lb. a.i.) per 100 gals. of water per application. • For repeat applications, minimum spray interval is 14 days • On Crepe myrtle, apply as paint-on slurry to the trunk in a band of 6 to 12 inches above the ground. Maximum single application rate is 4 tbsp. of the product per 1 tbsp. of water.
Douglas fir tussock moth larvae, Gypsy moth larvae*, Webworms	0.66 lb. (10.6 ozs.)	<ul style="list-style-type: none"> • Nursery crops: Before treating large plantings, spray only a few plants and observe 2 weeks for phytotoxicity. • **Repeat applications may be necessary where there is continuous crawler production. 	
Scales**	0.66 lb. (10.6 ozs.)	<ul style="list-style-type: none"> • Nursery crops: Before treating large plantings, spray only a few plants and observe 2 weeks for phytotoxicity. • **Repeat applications may be necessary where there is continuous crawler production. 	
Ponderosa pine needle miner ; Grasshoppers	0.66 lb. (10.6 ozs.)	<ul style="list-style-type: none"> • Timing is important. Consult your Farm Advisor or County Extension Agent. • Apply as grasshoppers begin to appear. • Apply with hydraulic sprayer as full coverage spray. 	
California oakworm, Cankerworms (Spring and Fall)	0.33 to 0.66 lb. (5.3 to 10.6 ozs.)	<ul style="list-style-type: none"> • As insect pests begin to appear. Use the higher amount when larger larvae are present. • Apply with hydraulic sprayer. 	
Nantucket pine tip moth larvae	1 lb. (16 ozs.)	<ul style="list-style-type: none"> • Timing is important. Consult your Farm Advisor or County Extension Agent. Repeat applications will be required for subsequent generations. • Apply with hydraulic sprayer. 	
Root weevil (adults)	1 lb. (16 ozs.)	<ul style="list-style-type: none"> • Apply when first feeding damage occurs. • Repeat applications at 4 week intervals until the first heavy frost may be necessary for complete foliage protection. • Apply with hydraulic sprayer as full coverage spray. 	
Box elder bugs, Budworms, Leafhoppers, Sawflies	1 lb. (16 ozs.)	<ul style="list-style-type: none"> • As insect pests begin to appear. • Apply with hydraulic sprayer as full coverage spray. 	
Japanese beetle	1.33 (21.3 ozs.)	<ul style="list-style-type: none"> • As insect pest begins to appear. Repeat applications may be necessary. • Apply with hydraulic sprayer as full coverage spray. 	
Elm leaf beetle (larvae)	1.33 (21.3 ozs.)	<ul style="list-style-type: none"> • As larvae begin to appear. Will not prevent eggs from hatching. • Apply with hydraulic sprayer as full coverage spray. 	

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Douglas Fir (Christmas Trees)

Insect Pest	This Product Per 100 Gals.	Time of Application and Use Instructions	Additional Use Restriction
Douglas fir needle midge	0.66 lb. (10.6 ozs.)	<ul style="list-style-type: none"> Apply no more than 2 weeks prior to bud burst. Apply in no less than 2 gals. of spray per acre by air or in 100 gals. of spray per acre by ground. For additional pest management information, consult your County Extension Service. 	<ul style="list-style-type: none"> Do not apply more than 0.66 oz. (0.5 lb. a.i.) per acre. Do not make more than one application per season.

Flowering Crabapples

Insect Pest	This Product Per 100 Gals.	Time of Application and Use Instructions	Additional Use Restrictions
Aphids, Leafrollers, Tent caterpillars	0.33 lb. (5.3 ozs.)	<ul style="list-style-type: none"> Apply as insect pests begin to appear. Apply with hydraulic sprayer. Phytotoxicity has occurred on the following Crabapple varieties: Hopa, Ichonoski, Malusfloribunda, Pink perfection, Red wine and Snow cloud. 	<ul style="list-style-type: none"> Do not apply more than 0.33 lb. (0.25 lb. a.i.) per 100 gals. of water per application. For repeat applications, minimum spray interval is 28 days. Do not apply more often than 3 times in a growing season.

TURFGRASS (Golf Course)

USE RESTRICTIONS

- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.
- Do not apply to Turfgrass by air.
- Do not apply more than 5.3 lbs. (4.0 lbs. a.i.) per acre to Golf Courses.
- For repeat applications, minimum spray interval is 7 days.

Insect Pest	This Product Per 1,000 Sq. Ft.	Time of Application and Use Instructions	Additional Use Restriction(s)
Cutworm, Fall armyworm, Southern armyworm, Yellow striped armyworm	0.5 to 1.2 ozs. (1.33 to 3.33 lbs./A)	<ul style="list-style-type: none"> As insect pests appear. A repeat application at 2 week intervals may be necessary. Apply the specified amount in 1,000 sq. ft. Use a minimum of 5 gals. of water per 1,000 sq. ft. to obtain good coverage. 	-
Chinch bugs	0.5 to 1.2 ozs. (1.33 to 3.33 lbs./A)	<ul style="list-style-type: none"> Apply as needed for knockdown of adult population. Apply the specified amount in 1,000 sq. ft. Use 1 to 15 gals. of water per 1,000 sq. ft. to obtain good coverage. 	-
Sod webworm	0.5 to 1.2 ozs. (1.33 to 3.33 lbs./A)	<ul style="list-style-type: none"> As insect pest begins to appear. Use the higher amount when quick knockdown is needed or with heavy infestations. 	<ul style="list-style-type: none"> Against sod webworms, do not repeat application at more than one week intervals.
Leafhopper	1 oz. (2.66 lbs./A)	<ul style="list-style-type: none"> Apply the specified amount in 1,000 sq. ft. Use 1 to 15 gals. of water per 1,000 sq. ft. to obtain good coverage. Repeat application may be necessary. 	

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Insect Pest	This Product Per 1,000 Sq. Ft.	Time of Application and Use Instructions	Additional Use Restriction(s)
Mole crickets (except CA) Spittlebugs (except CA)	1 to 2 ozs. (2.66 to 5.3 lbs./A)	<ul style="list-style-type: none"> • As insect pests appear. • For knockdown of existing populations, more than one application may be required throughout the growing season. For heavy infestations, use the higher listed rate. • Apply the specified amount in 1,000 sq. ft. • Use 1 to 15 gals. of water per 1,000 sq. ft. to obtain good coverage. • Apply during late afternoon or early evening hours and after an irrigation. • The use of a lemon fragrance substance in the spray mix may enhance control by acting as a flushing agent and thus provide increased Mole Cricket contact with this product. 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 tsps. per gal. water for small total mix volumes or 6 fl. oz. per 50 gals. water for large total mix volumes. 	<ul style="list-style-type: none"> • Do not irrigate after application.
Greenbug (<i>Schizapis graminun</i>), Grasshoppers	0.5 oz. (1.33 lbs./A)	<ul style="list-style-type: none"> • Apply when insect pests or their damage first appears. Repeat as necessary. • Apply the specified amount in 1,000 sq. ft. to obtain good coverage. 	<ul style="list-style-type: none"> • Do not repeat application at more than one week intervals. • Do not mow turfgrass for at least 24 hours after application.
Black turfgrass <i>Ataenius</i> (except CA)	1.5 to 2 ozs. (4 to 5.3 lbs./A)	<ul style="list-style-type: none"> • Apply when insect pests or their damage first appears. • Apply the specified amount in 1,000 sq. ft. • Use a minimum of 5 gals. of water per 1,000 sq. ft. • Irrigate lightly after application (not more than one-half inch). • Use the higher listed rate for severe infestation. 	-

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TURFGRASS (Sod Farm)

USE RESTRICTIONS

- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.
- Do not apply to Turfgrass by air.
- Do not apply more than 4 lbs. (3 lbs. a.i.) per acre to Sod farms.
- For repeat applications, minimum spray interval is 7 days.
- Allow at least 3 days between last application and harvesting of sod.

Insect Pest	This Product Per 1,000 Sq. Ft.	Time of Application and Use Instructions	Additional Use Restriction
Cutworm, Fall armyworm, Grasshopper, Greenbug, Leafhopper, Sod webworm, Southern armyworm, Yellow striped armyworm	0.5 to 1.33 ozs. (1.33 to 3.33 lbs./A)	<ul style="list-style-type: none"> • As insect pests appear. • A repeat application at 2 week intervals may be necessary. • Apply the specified amount in 1,000 sq. ft. • Use a minimum of 5 gals. of water per 1,000 sq. ft. to obtain good coverage. 	-
Chinch bugs, Mole cricket (except CA), Spittlebug (except CA)	1.33 to 1.5 ozs. (3.33 to 4 lbs./A)	<ul style="list-style-type: none"> • Apply as needed for knockdown of adult population (10 to 14 days). • Apply the specified amount in 1,000 sq. ft. • Use 1 to 15 gals. of water per 1,000 sq. ft. to obtain good coverage 	<ul style="list-style-type: none"> • Do not apply more than 4 lbs. per acre in a single application.
Sod webworm	0.5 to 1 oz. (1.33 to 2.66 lbs./A)	<ul style="list-style-type: none"> • Apply as insect pest begins to appear. • Use the higher listed rate for quick knockdown or with heavy infestations. • Apply the specified amount in 1,000 sq. ft. • Use 1 to 15 gals. of water per 1,000 sq. ft. to obtain good coverage. 	<ul style="list-style-type: none"> • Do not apply more than 4 lbs. per acre in a single application. • Do not repeat application at more than one week intervals.

TURFGRASS (Fire Ants and Harvester Ants Mound Treatment)

USE RESTRICTION

- Do not treat mound more than once per season.

Residential, Recreational and Commercial Turf

Insect Pest	This Product	Time of Application and Use Instructions	Additional Use Restriction
Imported fire ants, Harvester ants	Drench Method: Mix 0.33 lb. in 26.6 gals. of water.	<ul style="list-style-type: none"> • For best results, apply in the early morning or late afternoon when the ants are most active. • Apply 1 gal. of the mix to each mound area by sprinkling the mound until wet and treat a 4 feet diameter circle around the mound. • Applications made under prolonged hot and dry weather conditions may be ineffective due to the location of the ants deep within the nest. • Grass in treated areas may be injured. 	-

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OUTDOOR AND PERIMETER SPRAY (Excluding Residential Turf)

USE RESTRICTIONS

- 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.

Insect Pest	Rate of This Product	Time of Application and Use Instructions	Additional Use Restrictions
Wasp	Mix 0.33 lb. in 3.3 gals. of water	<ul style="list-style-type: none"> • Treat early or late in the day as wasps are generally less active during these times. • Apply the specified amount of this product per each gallon of water used. • Apply as a spot treatment to the nest, nest entrance, and surrounding areas where the wasps alight. 	<ul style="list-style-type: none"> • Pest Control Operator: The use of low pressure hand wand equipment for perimeter or wasp treatments is prohibited.
Ants (excluding Fire ants, Carpenter, Harvester and Pharaoh ants), Crickets, Cockroaches, Earwigs, Pillbugs	Mix 0.33 lb. in 3.3 gals. of water	<ul style="list-style-type: none"> • As insect pests appear. • 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. 	

ORNAMENTAL PLANTS GROWN FOR CUT FLOWER PRODUCTION

USE RESTRICTIONS

- Do not apply more than 1.33 lbs. (1 lb. a.i.) and 1 lb. (0.75 lb. a.i.) per 100 gals. of water for ornamental plants grown for cut flowers outdoors and greenhouses, respectively.
- For repeat applications, minimum spray interval is 14 days for ornamental plants grown outdoors and 5 days for ornamental plants grown in the greenhouse.
- Do not apply by low pressure handwand on ornamental plants grown outdoors.

Chrysanthemums, Daisies, Gladioli, Roses

Insect Pest	This Product per 100 Gals. of Water	Time of Application and Use Instructions	Additional Use Restrictions
Aphids, Lygus, Thrips	0.66 lb. (10.6 ozs.)	<ul style="list-style-type: none"> • As insect pests begin to appear. • Apply with a hydraulic sprayer as 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. 	

GREENHOUSE (Commercial Only) AND ORNAMENTAL PLANTS, FLORAL CROPS, FOLIAGE PLANT CROPS, AND GROUND COVERS (Plants Not Produced for Cut Flower Production)

USE RESTRICTIONS

- Not for residential greenhouse use.
- Do not apply more than 1.33 lbs. (1 lb. a.i.) per 100 gals. of water and 1.33 lbs. (1 lb. a.i.) for ornamental plants grown outdoors and greenhouses, respectively.
- Do not apply by low pressure handwand on ornamental plants grown outdoors.
- For repeat applications, minimum spray interval is 14 days for ornamental plants grown outdoors and 5 days for ornamental plants grown in the greenhouse, unless otherwise stated.
- 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.

Chrysanthemums

Insect Pest	This Product per 100 Gals. of Water	Time of Application and Use Instructions	Additional Use Restriction(s)
Aphids, Thrips	0.66 lb. (10.6 ozs.)	<ul style="list-style-type: none"> • As aphids or thrips begin to appear or at tight flower bud stage. • Apply with a hydraulic sprayer as full coverage spray. • Phytotoxicity has occurred in the following varieties: Albatross, Bonnie Jean, Dixie, Garland, Gem, Iceberg, Pride, Showoff, Statesman, Tally Ho, Westward Ho, and Wild honey. • Before treating large plantings, spray only a few plants and observe 2 weeks for phytotoxicity. • Application in flower may cause flower damage. 	<ul style="list-style-type: none"> • Do not apply more often than once every 28 days on chrysanthemums.

Floral Crops (Dahlias, Daisies, Easter Lily, Gladioli, Gypsophila, Pachysandra, Pansy, Peony, Sedum, Statice, Strawflower, Yarrow, Zinnia); Foliage Plants (Anthuriums, Cacti, Orchids); Poinsettia

Insect Pest	This Product Per 100 Gals. of Water	Time of Application and Use Instructions	Additional Use Restriction(s)
Aphids	0.33 to 0.66 lb. (5.3 to 10.6 ozs.)	<ul style="list-style-type: none"> As aphids begin to appear. See "Additional Use Instructions" below.	
Mealybugs, Scales (crawlers), Thrips, Whiteflies	0.66 lb. (10.6 ozs.)	Mealybugs and Whiteflies: <ul style="list-style-type: none"> As they appear. A repeat application at a 2 week interval may be necessary for control. Scales: <ul style="list-style-type: none"> As crawlers begin to appear. A repeat application at a 2 week interval may be necessary where there is continuous crawler production. See "Additional Use Instructions" below.	
Sweet potato whiteflies (except CA)	1.3 lb. (5.3 ozs.) + 10.6 fl. ozs. of Tame® 2.4 EC	<ul style="list-style-type: none"> Apply when insect pest appears. If population is well established, make one application of the tank mix and follow with Tame 2.4 EC alone at 16 fl. ozs. per 100 gals. of water. See Tame 2.4 EC label for instructions. See "Additional Use Instructions" below.	

Additional Use instructions

- Apply the specified amount with hydraulic sprayer as a full coverage spray.
- The addition of a wetting agent may be required on difficult to wet foliage.
- Phytotoxicity has occurred on the following foliage plants: *Blechnum gibbum*, *Cissus antartica*, *Ficus triangularis*, *Fittonia verschaffelti*, *Maranta leuconeura kerchoveana*, *Pachysandra lutea*, *Plectranthus australis*, *Polypodium aureus*, *Poylstichum*, *Pteris ensiformis*, *Tolmiea menziesii*. Before treating large plantings, spray only a few plants and observe 2 weeks for varietal phytotoxicity.
- On Poinsettias, application after bract formation may result in phytotoxicity on certain varieties.

Roses

Insect Pest	This Product Per 100 Gals. of Water	Time of Application and Use Instructions	Additional Use Restriction(s)
Aphids, Leafrollers, Thrips	0.66 to 1 lb. (10.6 to 16 ozs.)	<ul style="list-style-type: none"> As insect pests begin to appear. Use the higher listed rate when large larvae of leafrollers are present. Apply with a hydraulic sprayer as full coverage spray. Application in flower may result in flower damage. 	

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Protect from excessive heat. Do not store or transport near feed or food.

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill outer bag. Dispose of outer bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

Manufactured For:



Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

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SUB-LABEL 2



Acephate 75 SP

Soluble Powder Insecticide

For Hopper Box and Ant Treatment Use

ACTIVE INGREDIENT:

Acephate..... 75.0%

OTHER INGREDIENTS:..... 25.0%

TOTAL: 100.0%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See FIRST AID Below

EPA Reg. No. 19713-400

EPA Est. No. 19713-XX-XXX

Net Content: 1 LB.

FIRST AID Acephate is an organophosphate that inhibits cholinesterase.
IF SWALLOWED: <ul style="list-style-type: none"> • 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 by mouth to an unconscious or convulsing person.
IF IN EYES: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.
NOTE TO PHYSICIAN: This material contains a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure but decisions regarding treatment will usually need to be made before test results are available. If signs and symptoms of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM is also antidotal and may be administered in conjunction with atropine but should not be used alone.

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PRECAUTIONARY STATEMENTS

Hazards To Humans and Domestic Animals

CAUTION: Harmful if swallowed. Avoid contact with eyes, skin or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils or neoprene ≥ 14 mils. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves and shoes plus socks.

In addition, mixers and loaders supporting hopper box seed treatments must wear: a NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P or HE filter.

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.

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds.

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 or soil incorporate spills.

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

This product and its degradate are highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

DIRECTIONS FOR USE

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

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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), restricted entry interval (REI) and notification to workers. The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 24 hours. PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water, is: Coveralls, chemical-resistant gloves made of any waterproof material and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow others to enter until dusts have settled.

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COTTON (Seed Hopper Box Treatment)

USE RESTRICTIONS

- Do not apply more than 4.2 ozs. (0.2 lb. a.i.) per acre.
- Do not apply more than once per season.
- Do not use this product with air planters since loss of product will occur.
- The processing of treated seed for oil or use for food/feed is prohibited.
- Use of this product for cotton seed hopper box treatment is not permitted in Arizona, California and the Blacklands of Texas.

Insect Pest	This Product Per Acre	Use Instructions
Black (Greasy) cutworm, Cotton aphid, Thrips (including Western flower thrips)	3 to 4 ozs.	<ul style="list-style-type: none"> • Add to the seed in the planter box as dry powder to achieve an application rate of 3 to 4 ozs. per acre. • Even coverage of seed is required for acceptable insect control. Plants grown from improperly treated seed may not exhibit insect control. To obtain even coverage, fill planter box one-half full of seed, then add one-half of the required amount of this product and mix thoroughly. Add remainder of seed and this product to the hopper box and thoroughly mix. • Improved distribution of this product on seed can be achieved by premixing both in a separate container and then transferring treated seed to hopper box.

Additional Use Restriction for Hopper Box Use on Cotton:

PEANUTS (Planter Box Seed Treatment)

USE RESTRICTIONS

- Do not apply more than 3 ozs. of this product per 100 pounds of seeds.
- Do not apply more than once per season.
- The processing of treated seed for oil or use for food/feed is prohibited.
- Use of this product for peanut planter box treatment is limited to AL, FL, GA, and VA.

Insect Pest	This Product Per 100 Pounds of Seed	Use Instructions
Thrips	3 ozs.	<ul style="list-style-type: none"> • Apply this product in the planter box as a dry powder. • Even coverage of seed is required for acceptable insect control. <p>MIXING: The following procedures for application of this product to peanut seed must be followed to ensure complete and adequate coverage: STEP 1: Fill planter box one-third full of seed. Apply one-third of total amount of this product evenly over the surface of the peanuts. STEP 2: Fill planter box two-thirds full of seed. Apply one-third of total amount of this product evenly over the surface of the peanuts. STEP 3: Fill planter box with remaining seed. Apply one-half of total required amount of this product evenly over the surface of the peanuts. DO NOT attempt to mix this product with the seed peanuts by stirring or by other mechanical agitation. Such action will result in unacceptable damage to seed prior to planting.</p>

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TOBACCO - ANT MOUND TREATMENT (Except CA)

USE RESTRICTIONS

- Do not apply a total of more than 5.3 lbs. (4 lbs. a.i.) per acre per crop cycle. This includes ALL methods of application on tobacco.
- Treat a maximum of 13 mounds per acre.
- Do not treat more than once per crop cycle.

Insect Pest	This Product	Use Instructions	Days To Harvest
Ants (including Imported Fire ants and Harvester ants)	Dry Method: 1 to 2 tsps.	<ul style="list-style-type: none"> • Evenly distribute this product over the mound. • For best results, apply 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. 	3

NON-CROP AREAS - ANT MOUND TREATMENT

USE RESTRICTION

- Do not apply more than 2 tsps. of this product per mound.
- Do not treat mound more than once per season.

Insect Pest	This Product	Use Instructions	Days To Harvest
Ants (including Imported Fire ants and Harvester ants)	Dry Method: 1 to 2 tsps.	<ul style="list-style-type: none"> • Evenly distribute this product over the mound. • For best results, apply 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. 	-

TURFGRASS (Commercial, Residential, and Recreational Turf) - ANT MOUND TREATMENT

USE RESTRICTIONS

- Do not apply more than 2 tsps. of this product per mound.
- Do not treat mound more than once per season.
- 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.

Insect Pest	This Product	Use Instructions	Days To Harvest
Imported Fire ants, Harvester ants	Dry Method: 1 to 2 tsps.	<ul style="list-style-type: none"> • Evenly distribute this product over the mound. • For best results, apply 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 areas may be injured. 	-

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STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Protect from excessive heat. Do not store or transport near feed or food.

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

CONTAINER DISPOSAL:

Nonrefillable Container (flexible-bag-all weights): Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. When empty, offer for recycling, if available. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

Manufactured For:



Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

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