



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

EPA Reg. Number:
55431-8

Date of Issuance:
NOV 18 2004

Term of Issuance: **Conditional**

Name of Pesticide Product:
Dead On Target 0.2% Bifenthrin
Granules

NOTICE OF PESTICIDE:

Registration
 Reregistration

(Under FIFRA as amended)

Name and Address of Registrant (include ZIP Code):

Arizona Chemical Group, Inc.
P.O. Box 20464
Mesa, AZ 85277

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is **conditionally** registered in accordance with FIFRA sec. 3(c)(7)(A), since you agreed in your letter dated October 27, 2004 that:

1. You will submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
2. You will make the following label changes before you release the product for shipment:
 - a) Revise the EPA Registration Number to read "EPA Reg. No. 55431-8."
 - b) Revise the heading "*Statement of Practical Treatment*" to read: "*First Aid.*" Please note that EPA is encouraging registrants to include a toll free hot line number and to arrange the First Aid statements in a box format as presented in PR Notice 2001-1(III) (J).
 - c) Revise the "If on skin" statement according with PR Notice 2001-1: "*If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or a doctor for treatment advice.*"

- d) Under Environmental Hazards change "*Washwaters*" to "washwaters".
- e) Under Directions for Use change "*commercial see production*" to "*commercial seed production*."
- f) Under Direction for Use add: "*Do not apply more than 0.2 lb. active ingredient (a.i.) per acre per application on residential use sites (i.e., around homes, apartment buildings, condominiums, non-agricultural outbuildings, non-commercial greenhouses, pre-schools or day care facilities). May be applied at up to 0.4 lb. ai. per acre per application on non-residential use sites (i.e., around institutional, public, commercial or industrial building; parks, recreational areas or athletic fields).*" Please refer to the cited product label.
- g) Under the table for application rates add the following restriction: "*In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).*"

In New York State, do make a single repeat application of Dead On Target 0.2% Bifenthrin Granules if there are signs of renewed insect activity, but not sooner than two weeks after the first application." Please refer to the cited product label.

- h) Delete the words "*sale to*" in the first paragraph, front panel.
3. This submission satisfies the data requirements as specified in 40 CFR 158.155, 158.160, 158.165, 158.167, 158.175, and 158.180 with respect to product identity and composition, description of materials used to produce the product, description of formulation process, discussion of formation of impurities, certified limits, and the enforcement analytical method.
 4. This submission satisfies the data requirements as specified in 40 CFR 158.190 with respect to physical and chemical properties, with the exception of the storage stability and corrosion characteristics. A 1-year study is required to satisfy these data requirements.
 5. Submit a corrected offer to pay statement with Section I checked, method of data support. We assume you are choosing the cite-all option under the selective method, therefore check box 2.
 6. Please submit three (3) copies of your final printed labeling before releasing the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product

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bearing amended labeling constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have any questions regarding this action, please contact Olga Odiott of my team at (703) 308-9369.

Signature of Approving Official:



George T. LaRocca, Product Manager (13)
Insecticide Branch/Registration Division (7505C)

Date:

NOV 18 2004

Enclosure

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DEAD ON TARGET 0.2% BIFENTHRIN GRANULES

Only for sale to, use, and storage by commercial applicators for use to control Ants (including imported Fire Ants), Mole Crickets and other insect pests on lawns in landscaped areas and perimeters around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

| | |
|--------------------------------|--------------|
| Active Ingredient: Bifenthrin* | 0.2% |
| Inert Ingredients | <u>99.8%</u> |
| | 100.0% |

*Cis isomers 97%, minimum, trans isomers 3% maximum

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See other panels for additional precautionary information.

STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.
Note to Physician: This product is a pyrethroid. If large amounts have been ingested, milk, cream and other digestible fats and oils may increase absorption and so should be avoided.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS (and Domestic Animals)

Caution: Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

Environmental Hazards

This pesticide is extremely toxic to fish and aquatic invertebrates. 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 apply when weather conditions favor drift from treated areas. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment Washwaters or rinsate.

Arizona Chemical Group, Inc.
P.O. Bx 20464
Mesa, AZ 85277
EPA Reg. No. 55431-
EPA EST No. 73273-TX-1

Emergency Contact Infotrack 800-535-5053

2 Pounds

**ACCEPTED
with COMMENTS
In EPA Letter Dated
NOV 18 2004**
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
55431-8

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Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Not for use on plants being grown for sale or other commercial use, or for commercial see production, or for research purposes. For use on plants intended for aesthetic purposes or climate modification and being grown in interior plantscapes, ornamental gardens or parks, or lawns or grounds.

Do not broadcast apply more than 0.4 lbs. a.i. (200 lbs. Dead on Target 0.2% Bifenthrin Granules) per acre per year.

Not for use on golf courses, sod farms, nurseries, in commercial greenhouses or on grass grown for seed.

STORAGE AND DISPOSAL

Prohibitions

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

Pesticide Storage

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use close tightly. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call Infotrack 800-535-5053
To confine spill: Cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

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

Paper and plastic bags: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LAWN AND PERIMETER APPLICATIONS

Lawn Application: Broadcast Dead on Target 0.2% Bifenthrin Granules granular insecticide with suitable application equipment to ensure uniform coverage over the treatment area.

APPLICATION RATES

The application rates listed in the following table will provide excellent control of the respective pests under typical conditions. However, at the discretion of the applicator, Dead on Target may be applied at up to 0.4 lb AI/A to control each of the pests listed in this table.

| Pest | Active Ingredient Lbs. per acre | Application Rate Dead on Target 0.2% | |
|---|------------------------------------|---|----------------------------|
| Armyworms ¹ Cutworms ¹ | 0.1 lbs AI/A | 50 lbs. per acre | 1.15 lbs. per 1000 sq. ft. |

| | | | |
|---|---------------------|-------------------------|----------------------------------|
| Sod Webworm ¹ | | | |
| Annual Bluegrass Weevil (<i>Hyperodes</i>) (Adult) ² Billbugs (Adult) ³ Black Turfgrass Ataenius (Adult) ⁴ Leafhoppers Mealybugs | 0.1 – 0.2 lbs. AI/A | 50 – 100 lbs. per acre | 1.15 – 2.3 lbs. per 1000 sq. ft. |
| Ants Centipedes Chinch Bugs ⁵ Fleas (Larvae) ⁶ Fleas (Larvae) Imported Fire Ants (Adult) ⁷ Millipedes Mole Cricket (Adult) ⁸ Mole Cricket (Nymph) ⁹ Ticks ¹⁰ | 0.2 – 0.4 lbs AI/A | 100 – 200 lbs. per acre | 2.3 – 4.6 lbs. per 1000 sq. ft. |
| Pillbugs Sowbugs | 0.4 lbs. AI/A | 200 lbs. per acre | 4.6 lbs. per 1000 sq. ft. |

Comments

¹**Armyworms, Cutworms, and Sod Webworms:** To ensure optimum control, irrigate the treated area with up to 0.1 inch of water immediately after application to activate (release from the granule) the insecticide.

²**Annual Bluegrass Weevil (*Hyperodes*) adults:** Applications should be timed to control adult Weevils as they leave their over-wintering sites and move into grass areas. This movement generally begins when *Forsythia* is in full bloom and concludes when flowering dogwood is in full bloom. Consult your State Cooperative Extension Service for more specific information regarding application timing.

³**Billbug adults:** Applications should be made when adult billbugs are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for information specific to your region. In temperate regions, spring applications targeting billbug adults will also provide control of over-wintering chinch bugs.

⁴**Black Turfgrass Ataenius adults:** Applications should be made during May and July to control the first and second generation of black turfgrass ataenius adults, respectively. The May application should be timed to coincide with the full bloom stage of Vanhoutte spiraea (*Spiraea vanhouttei*) and horse chestnut (*Aesculus hippocastanum*). The July application should be timed to coincide with the with blooming of Rose of Sharon (*Hibiscus syriacus*).

⁵**Chinch Bugs:** Chinch bugs infest the base of grass plants and are often found in the thatch layer. Irrigate the treated area with up to 0.25 inches of water immediately after application to activate (release from the granule) the insecticide. Chinch bugs can be one of the most difficult pests to

control in grasses and the higher application rates may be required to control population that contain both nymphs and adults during the summer.

6 Flea larvae: Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Irrigate the treated area with up to 0.5 inches of water immediately after application to activate (release from the granule) the insecticide.

7 Imported Fire Ants: Control will be optimized by combining broadcast applications that will control foraging workers and newly mated fly-in queens with mound treatments that will eliminate existing colonies. If the soil is not moist, this it is important to irrigate before application. Broadcast treatments should apply up to 0.4 lb AI/A. Mounds should be treated by applying 1/2 cup of Dead on Target 0.2% per mound and then drenching the mound with 1 to 2 gallons of water. The mounds should be treated with sufficient force to break their apex and allow insecticide to flow into the ant tunnels. A four foot diameter circle around the mound should also be treated. For best results, apply in cool weather (60-80F) or in early morning or late evening hours.

8 Mole Cricket adults: Achieving acceptable control of adult mole crickets is difficult because preferred grass areas are subject to continuous invasion during the early spring by this extremely active stage. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole cricket closer to the soil surface where contact with the insecticide will be maximized. Grass areas that receive pressure from adult mole crickets should be treated at peak egg hatch to ensure optimum control of subsequent nymph population. (see below).

9 Mole Cricket nymphs: Grass areas that received intense adult mole cricket pressure in the spring should be treated immediately prior to peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher application rates and more frequent applications to maintain acceptable control. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.

10 Ticks (including ticks that transmit Lyme Disease and Rocky Mountain Spotted Fever): Do not make spot applications. Treat the entire area where exposure to ticks may occur. Use higher application rates when treating areas with dense ground cover or heavy leaf litter. Ticks may be reintroduced from surrounding areas on host animals. Do not allow public use of treated areas during application.

Dear ticks (*Ixodes sp.*) have a complicated life cycle that ranges over a two year period and involves four life stages. Applications should be made in mid to late-spring to control larvae and nymphs that reside in the soil and leaf litter.

American dog ticks: may be a considerable nuisance in suburban settings, particularly where homes are built on land that was previously field or forest. These ticks commonly congregate along paths or roadways where humans are likely to be encountered. Applications should be made as necessary from mid-spring to early fall to control American dog tick larvae, nymphs and adults.

Perimeter Application: Apply to ground area 5 to 10 feet wide around and adjacent to the structure.

Boundary Applications: Apply to soil areas, ornamental gardens, pavement crevices, fence lines, planter areas, vegetation areas and mulch areas.

| Application Rate: Lbs. per 1000 sq. ft. | Band Width | Pounds of Dead on Target 0.2% for Perimeter Applications Linear Distance (Feet) Around Structure | | | | | | | |
|---|------------|--|-----|------|------|------|------|------|------|
| | | 100 | 150 | 200 | 250 | 300 | 400 | 500 | 1000 |
| 2.3 | 5 ft | 1.3 | 1.9 | 2.5 | 3.0 | 3.6 | 4.8 | 5.9 | 11.7 |
| 2.3 | 10 ft | 3.0 | 4.2 | 5.3 | 6.5 | 7.6 | 9.9 | 12.2 | 23.7 |
| 3.0 | 5 ft | 1.7 | 2.5 | 3.3 | 3.9 | 4.7 | 6.3 | 7.7 | 15.2 |
| 3.0 | 10 ft | 3.9 | 5.4 | 6.9 | 8.5 | 9.9 | 12.9 | 15.9 | 30.9 |
| 3.5 | 5 ft | 2.0 | 2.9 | 3.8 | 4.5 | 5.4 | 7.2 | 8.9 | 17.5 |
| 3.5 | 10 ft | 4.5 | 6.3 | 8.0 | 9.8 | 11.4 | 14.9 | 18.3 | 35.5 |
| 4.6 | 5 ft | 2.6 | 3.8 | 5.0 | 6.0 | 7.2 | 9.6 | 11.8 | 23.4 |
| 4.6 | 10 ft | 6.0 | 8.4 | 10.6 | 13.0 | 15.2 | 19.8 | 24.4 | 47.4 |

Note: The amounts of Dead on Target 0.2% listed in the above table are based on the total area being treated. This area is determined by multiplying the linear distance by the band width and then adding to that value the area of a circle whose radius is equal to the band width (to account for the area treated at the four corners of a rectangular structure).

Fire and mound treatment: Apply ½ cup of Dead on Target 0.2% Bifenthrin Granules per mound and then drench the mound with 1 to 2 gallons of water. The mound should be drenched with sufficient force to break its apex and allow the insecticide to flow into the ant tunnels. For best results, apply in cool weather (65 to 80F) or in early morning or late evening hours. Treat new mounds as they appear. Food utensils such as teaspoons and measuring cups should not be used for food purposes after use with insecticides.

**INDUSTRIAL AND NON-AGRICULTURAL APPLICATIONS
(Including Industrial Sites, Parks, Ball Fields and Cemeteries)**

Broadcast Spot Applications: For the control of actively foraging ants (including Imported Fire Ants) broadcast uniformly 2.3 to 4.6 lbs. Dead on Target 0.2% Bifenthrin Granules per 1000 sq. ft. (0.2 to 0.4 lbs a.i./Acre). See comments section under **Lawn Applications** for additional rate recommendations.

Pad Mounted Electrical Sites: To reduce or prevent ant mound building activity on electrical pads, uniformly distribute 1.0 to 1.5 tablespoons (0.06 to 0.09 lbs.) of Dead on Target 0.2% Bifenthrin Granules per 4 sq. ft. of mounting pad. Where existing transformers are completely or partially filled with soil excavated by resident ants, remove any excess fill and level the remaining soil prior to application. **Food utensils such as tablespoons must not be used for food purposes after use in measuring pesticides.**

Note: Electrical transformers appear to be more attractive to ants during the cooler months. For best results treat in the Fall or early Spring.

Dead on Target 0.2% Bifenthrin Granules

Recommended Spreader Settings for Broadcast Applications

| Equipment | Ground Speed (MPH) | 100 Pounds per acre Once over | Spreader 100 Pounds per acre Once over | Headings 200 Pounds per acre Twice over | 200 Pounds per acre Twice over |
|---------------------------------------|--------------------|-------------------------------|--|---|--------------------------------|
| Hand Pushed | | | | | |
| LESCO Rotary | 3 | B+ ¼ | A + ½ | C + ½ | B + ¼ |
| Scotts R-84-1 Rotary | 3 | G | E | Not Rec. | G |
| Gandy Models (42,36, 30,24") | 3 | 12 | 10.5 | 16 | 12 |
| Spyker (all models) | 3 | 2.6 | 2 | 3.1 | 2.6 |
| Equipment Drawn (PTO=540 RPM) | | | | | |
| Gandy Models (42, 36, 30, 24") | 4.5 | 14 | 11.5 | 19 | 14 |
| Gandy 6500 Series | 4.5 | 15 | 11 | 20 | 15 |
| Gandy 10T Series | 5.0 | 16.5 | 12 | 24 | 16.5 |
| Herd GT-77 | 4.0 | | | 8-H | |
| Herd GT-77 | 8.0 | 8-H | | | 8-H |
| Lely 2.3202.001 | 4.5 | 2 | 1 | 3.5 | 2 |
| Lely Model L-400 | 4.5 | Not Rec. | Not Rec. | 2 | Not Rec. |
| Vicon PS402 | 4.5 | 10 | 7 | 16 | 10 |
| Vicon PS1002T | 4.5 | 13 | 9 | 21 | 13 |

Note: These recommended setting should be use as starting points when calibrating a spreader to achieve the desired application rate of Dead on Target 0.2% Bifenthrin Granules. After calibration, the technician should regularly observe the amount of Dead on Target 0.2% Bifenthrin Granules that is applied to a known area and make further setting adjustments, as necessary to maintain the appropriate application rate. Spreaders should be calibrated periodically to ensure that equipment wear or other factors have not altered the flow rate of Dead on Target 0.2% Bifenthrin Granules. Calibration instructions are included in the Owner's Manuel that was provided by the equipment manufacturer at the time of purchase.

Resistance: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to the resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

If resistance to this product develops in your area, this product, or other products with similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representative or pest management advisor for the best alternative method of control for your area.

Dealers Should Sell in Original Packages Only.

Terms for Sale or Use: On purchase of this product buyer and user agree to the following conditions.

Warranty: AGC makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations:

Follow directions carefully. Timing, method of application and weather conditions, mixture with other chemical not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by the buyer at this own risk.

Use of Products: ACG's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not use in accordance with directions or established safe practice.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.