

5481-519

3-28-2005

1/13



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

March 28, 2005

Darryle Brock
AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1250
Newport Beach, CA 92660

Subject: Label Amendment - Convert to Restricted Use with additional Uses
Wisdom Flowable
EPA Reg. No. 5481-519
Your Submission Dated September 17, 2004

Dear Mr. Brock:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

1. Add "Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse." to *Precautionary Statements* after "Avoid breathing dust (vapor or spray mist)"
2. On *Nursery Dilution Chart*, fourth box down under the column "25 gallons" for application volume of 200 gallons per acre, replace "4.0" with "5.0" fluid ounces and under the column "100 gallons" third box down, for application volume of 150 gallons per acre, replace "25.7" with "26.7" fluid ounces.
3. On page 7 add "4.0(0.020) 1/2, 1 1/3, 2, 10, 40" to the rate conversion table. Also this table should follow the Ornamentals and Greenhouses section.

4. Replace "Inert Ingredients" with "Other Ingredients" within the *Ingredients* statement.

Note, base on the route of exposure for eyes in this product (toxicity category IV), you are not required to have an "If eye" first aid statement. You may delete the statement if you wish. If you have any questions regarding this action, please contact BeWanda Alexander of my team at (703) 305-7460.

Sincerely,



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

3/13

RESTRICTED USE PESTICIDE

Toxic to Fish and Aquatic Organisms

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

WISDOM™ FLOWABLE

For use to control insect and mite pests in greenhouses and nurseries, as well as on golf courses and on ornamental and turf in landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas, golf courses, sod farms and athletic fields.

ACTIVE INGREDIENT:

Bifenthrin

(2 methyl [1,1'-biphenyl] 3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-
2,2-dimethyl-cyclopropanecarboxylate*

7.9%

INERT INGREDIENTS

92.1%

TOTAL

100.0%

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

Wisdom Flowable contains 2/3 pound active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

| | |
|--------------------------------|--|
| 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 do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. |
| 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. |
| If on skin or clothing: | <ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. |
| If in eyes: | <ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 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. |

EMERGENCY INFORMATION

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:

Transportation: CHEMTREC 1-800-424-9300
Other: AMVAC..... 1-323-264-3910

NOTE TO PHYSICIAN

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils or alcohol may increase absorption and so should be avoided.

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

EPA Reg. No. 5481-519
EPA Est. No. _____

Net Contents:
As Marked on Container

Made in U.S.A.



4100 E. Washington Blvd.
Los Angeles, CA 90023 U.S.A
1-323-264-3910 • www.amvac-chemical.com

ACCEPTED
with COMMENTS
In EPA Letter Dated
MAR 28 2005

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

5481-519

4/13

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution: Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust (vapor or spray mist).

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Applicators and Other Handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks.

Mixers and Loaders must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks
- Protective eyewear

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

USER SAFETY RECOMMENDATIONS

Users Should:

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

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. 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.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops if bees are 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.

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.

Do not apply this product through any kind of irrigation system.

5/13

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry to treated areas during the restricted entry interval (REI) of 12 hours.

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

- Coveralls
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton.
- Shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses. Keep children and pets off treated areas following application until the lawn has dried.

APPLICATION RECOMMENDATIONS

Landscape Ornamentals, Greenhouses, Nurseries, Sod Farms, Golf Courses and Home Lawn Uses (Including Interiorscapes, Plantscapes, and Ornamental Plantings Grown for Aesthetic Purpose).

General Applications Instructions

Wisdom Flowable formulation mixes readily with water and other aqueous carriers, and controls a wide spectrum of insects and mites on ornamentals, trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in greenhouses and interiorscapes including hotels, shopping malls, office buildings, etc., and, outdoor plantscapes, such as around residential dwellings, parks, institutional, public, commercial and industrial buildings, recreational, athletic fields, home lawns, golf courses and sod farms. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity during the season of application.

Wisdom Flowable may be tank-mixed with other products, including insect growth regulators. When tank mixing, Wisdom Flowable with other products, observe all precautions and limitations on each separate product label. The physical compatibility of Wisdom Flowable may vary with different sources of pesticide products and local cultural practices. Any tank mixtures which has not been previously tested should be prepared on a small scale (pint or quart jar) using the proper proportions of chemicals and water to ensure the physical compatibility of the mixture.

The following procedure is recommended for preparation of a new tank mix, unless specified otherwise in label directions: (1) Add wettable powders to tank water, (2) Agitate, (3) Add liquids and flowables, (4) Agitate, (5) Add emulsifiable concentrates, and (6) Agitate. If a mixture is found to be incompatible following this order of addition, try reversing the order of addition, or increase the volume of water. Note: If the tank mixture is found to be compatible after increasing the amount of water, then the sprayer will need to be recalibrated for a higher volume application. Do not allow tank mix to stand overnight.

Maximum rates: Do not apply more than 0.1 lb ai/acre (20 fl oz Wisdom Flowable) in a single application, no more than 0.2 lb ai/acre/year (40 fl oz Wisdom Flowable) for outdoor applications.

Maximum Nursery Rates: Do not apply more than 0.2 lb ai/acre (40 fl oz of Wisdom Flowable) in a single application or per year for outdoor applications.

Note: For large infestations of ants, imported fire ants, and mole crickets, a single application of 0.2 lb ai/acre (40 fl oz Wisdom Flowable) may be applied once per year.

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 resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

6/13

If resistance to this product develops in your area, this product, or other products with a 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.

Turf Dilution Chart

| Application Volume | Application Rate | Fluid Ounces of Wisdom Flowable Diluted to these Volumes of Finished Spray | | | | |
|--------------------|------------------|--|------------|------------|------------|-------------|
| | | 1 Gallon | 10 Gallons | 25 Gallons | 50 Gallons | 100 Gallons |
| 0.5 | 0.05 | 0.5 | 5.0 | 12.5 | 25.0 | 50.0 |
| 0.5 | 0.1 | 1.0 | 10.0 | 25.0 | 50.0 | 100.0 |
| 0.5 | 0.2 | 2.0 | 20.0 | 50.0 | 100.0 | 200.0 |
| 0.75 | 0.05 | 0.33 | 3.33 | 8.33 | 16.67 | 33.33 |
| 0.75 | 0.1 | 0.67 | 6.67 | 16.67 | 33.33 | 66.67 |
| 0.75 | 0.2 | 1.33 | 13.33 | 33.33 | 66.67 | 133.33 |
| 1 | 0.05 | 0.25 | 2.5 | 6.25 | 12.5 | 25.0 |
| 1 | 0.1 | 0.5 | 5.0 | 12.5 | 25.0 | 50.0 |
| 1 | 0.2 | 1.0 | 10.0 | 25.0 | 50.0 | 100.0 |
| 1.5 | 0.05 | 0.17 | 1.67 | 4.17 | 8.33 | 16.67 |
| 1.5 | 0.1 | 0.33 | 3.33 | 8.33 | 16.67 | 33.33 |
| 1.5 | 0.2 | 0.67 | 6.67 | 16.67 | 33.33 | 66.67 |
| 2 | 0.05 | 0.13 | 1.25 | 3.13 | 6.25 | 12.5 |
| 2 | 0.1 | 0.25 | 2.5 | 6.25 | 12.5 | 25.0 |
| 2 | 0.2 | 0.5 | 5.0 | 12.5 | 25.0 | 50.0 |
| 2.3 ^a | 0.05 | 0.11 | 1.09 | 2.72 | 5.43 | 10.87 |
| 2.3 ^a | 0.1 | 0.22 | 2.17 | 5.43 | 10.87 | 21.74 |
| 2.3 ^a | 0.2 | 0.43 | 4.35 | 10.87 | 21.74 | 43.48 |
| 3 | 0.05 | -- | 0.83 | 2.09 | 4.17 | 8.33 |
| 3 | 0.1 | 0.17 | 1.66 | 4.17 | 8.33 | 16.67 |
| 3 | 0.2 | 0.33 | 3.33 | 8.33 | 16.67 | 33.33 |
| 4 | 0.05 | -- | 0.63 | 1.56 | 3.13 | 6.25 |
| 4 | 0.1 | 0.13 | 1.25 | 3.13 | 6.25 | 12.5 |
| 4 | 0.2 | 0.25 | 2.5 | 6.25 | 12.5 | 25.0 |

*To convert to milliliters, multiply by 29.57.
 *100 gallons per acre.
 1 fl oz = 29.57 ml = 2 tablespoons = 6 teaspoons
 Do not use household utensils to measure Wisdom Flowable.

APPLICATION RECOMMENDATIONS

Grass Areas (including golf courses, sod farms, home lawns, lawn areas around parks, institutional, public, commercial and industrial buildings, recreational and athletic fields).

NOT FOR USE ON SOD FARMS IN THE STATE OF NEW YORK.

Apply Wisdom Flowable as a surface or sub-surface treatment. Use application volumes of up to 10 gallons per 1000 square feet to get uniform coverage when treating dense and or long grass foliage.

For low volume applications, less than 2 gallons/1000 square feet, immediate irrigation of treated area with at least 0.25 inches of water following application to ensure efficacy of sub-surface pests such as, but not limited to, mole crickets, is recommended.

New York State Restrictions:

In New York State, this product may not be applied to turf within 100 feet of a coastal marsh (or of a water body [lake, pond, river, stream, wetland, or drainage ditch].)

In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

Nursery Dilution Chart

| Application Volume Gallons Per Acre | Application Rate Pounds AI Per Acre | Fluid Ounces of Wisdom Flowable Diluted to these Volumes of Finished Spray | | | |
|--|--|--|------------|------------|-------------|
| | | 1 Gallon | 25 Gallons | 50 Gallons | 100 Gallons |
| 50 | 0.025 | 0.1 | 2.5 | 5.0 | 10.0 |
| 50 | 0.05 | 0.2 | 5.0 | 10.0 | 20.0 |
| 50 | 0.1 | 0.4 | 10.0 | 20.0 | 40.0 |
| 50 | 0.2 | 0.8 | 20.0 | 40.0 | 80.0 |
| 100 | 0.025 | 0.05 | 1.25 | 2.5 | 5.0 |
| 100 | 0.05 | 0.1 | 2.5 | 5.0 | 10.0 |
| 100 | 0.1 | 0.2 | 5.0 | 10.0 | 20.0 |
| 100 | 0.2 | 0.4 | 10.0 | 20.0 | 40.0 |
| 150 | 0.025 | 0.03 | 0.83 | 1.67 | 3.3 |
| 150 | 0.05 | 0.07 | 1.67 | 3.33 | 6.7 |
| 150 | 0.1 | 0.133 | 3.33 | 6.67 | 13.3 |
| 150 | 0.2 | 0.266 | 6.67 | 13.33 | 25.7 |
| 200 | 0.025 | 0.025 | 0.63 | 1.25 | 2.5 |
| 200 | 0.05 | 0.05 | 1.25 | 2.5 | 5.0 |
| 200 | 0.1 | 0.1 | 2.5 | 5.0 | 10.0 |
| 200 | 0.2 | 0.2 | 4.0 | 10.0 | 20.0 |
| 250 | 0.025 | -- | 0.5 | 1.0 | 2.0 |
| 250 | 0.05 | -- | 1.0 | 2.0 | 4.0 |
| 250 | 0.1 | -- | 2.0 | 4.0 | 8.0 |
| 250 | 0.2 | -- | 4.0 | 8.0 | 16.0 |
| 300 | 0.025 | -- | 0.42 | 0.83 | 1.7 |
| 300 | 0.05 | -- | 0.83 | 1.67 | 3.3 |
| 300 | 0.1 | -- | 1.67 | 3.33 | 6.7 |
| 300 | 0.2 | -- | 3.33 | 6.67 | 13.3 |

*To convert to milliliters, multiply by 29.57.
 1 fl oz = 29.57 ml = 2 tablespoons = 6 teaspoons
 Do not use household utensils to measure Wisdom Flowable.

Formula for Determining the Active Ingredient Content of the Finished Spray Mixture: The following formula may be used to determine the percent active ingredient that is in the spray tank after mixing Wisdom Flowable.

$$\frac{(7.9)(\text{fl oz of Wisdom Flowable added to tank})}{(\text{Gallons of finished spray mix})(128)} = \text{Percent active Ingredient of spray}$$

**RECOMMENDED APPLICATION RATES FOR LANDSCAPE
ORNAMENTALS AND GREENHOUSES**

| Pest | Rate lb. ai/ 10 gal. | Rate oz./ 10 gal. | Comments |
|--|-------------------------|----------------------|--|
| Ants Aphids Bagworms Blackvine Weevil Brown Soft Scales Broad Mites Budworms California Red Scale (Crawlers) Centipedes Clover Mites Crickets Cutworms Earwigs Elm Leaf Beetles Fall Webworms Flea Beetles Fungus Gnats Grasshoppers Lacebugs Leafhoppers Leaf Feeding Caterpillars Mealybugs Millipedes Orchid Weevil Pillbugs Pine Needle Scales (crawlers) Plant Bugs (incl. Lygus spp.) San Jose Scales (crawlers) Sowbugs Spiders Tent Caterpillars Tip Moths Weevils Whiteflies | 0.004 to 0.02 | 0.80 to 4.0 | Apply the specified rate of Wisdom Flowable as a full coverage foliar spray. Repeat as necessary to achieve control using higher rates as pest pressure and foliage area increases. To control Bagworm: Apply when larvae begin to hatch. Spray larvae directly. Applications made when larvae are young will be most effective. To control scale crawlers and twig borers: Treat trunks, stems, and twigs in addition to plant foliage. Certain cultivars may be sensitive to the final spray solution. A small number of plants should be treated prior to application of the entire planting. Use of an alternate class of chemistry in a treatment program is recommended to prevent or delay pest resistance. |
| European Crane Flies | 0.005 | 1.0 | |
| Citrus Thrips Beet Armyworm European Red Mite Leafrollers Spider Mites Thrips Twig Borers | 0.006 to 0.02 | 1.2 to 4.0 | |
| Japanese Beetles (adult) Leafminers Pecan Leaf Scorch Mite | 0.01 to 0.02 | 2.0 to 4.0 | |

9/13

Application to Home Lawns: Apply Wisdom Flowable as a broadcast treatment in 2 to 10 gallons of carrier per 1,000 square feet. Use higher volumes to get uniform coverage when treating dense grass foliage.

RECOMMENDED LAWN APPLICATION RATES

| Pest | Wisdom Flowable | Comments |
|---|---|--|
| Ants Armyworms Bluegrass Billbugs Chinchbugs Crane Flies Crickets (Mole)* Cutworms Earwigs Fall Webworms Fleas Grasshoppers Mites Sod Webworms Ticks | 0.23 to 0.46 oz. per 1,000 sq. ft. -or- 10 to 20 oz. per Acre -or- 0.05 to 0.1 lbs. AI per Acre | *For control of over-wintered Mole Crickets apply Wisdom Flowable at the lower rate early Spring. For the control of adult Mole Crickets in late-Summer or early Fall apply the higher rate. To enhance control a non-ionic surfactant or a silicon based surfactant (0.25% w/v) may be applied as a tank-mix for the control of late Summer or Fall Adult Mole Crickets. For best results irrigate immediately after application with a minimum of 0.25 inches of water. |
| Imported Fire Ants Japanese Beetles (adult) | 0.46 to 0.92 oz. per 1,000 sq. ft. -or- 20 to 40 oz. per Acre | |

| Rate Wisdom Flowable in oz. (lbs. AI)/10 gals. | Wisdom Flowable/Gallons of Finished Spray | | | | |
|--|---|--------|--------|---------|----------|
| | 1 gal. | 3 gal. | 5 gal. | 25 gal. | 100 gal. |
| 0.80 (0.004) | | 1/4 | 1/2 | 2 | 8 |
| 1.20 (0.006) | 1/8 | 1/3 | 2/3 | 3 | 12 |
| 2.0 (0.010) | 1/4 | 2/3 | 1 | 5 | 20 |

Imported Fire Ant Quarantine Treatment

Against Imported Fire Ants (IFA) in Potting Media (including balled and containerized nursery grown ornamental trees, shrubs, plants, flowers, conifers, bushes, Christmas trees, and non-bearing fruit and nut trees). Wisdom Flowable is approved and can be used in accordance with the USDA Imported Fire Ant Quarantine Program. Wisdom Flowable may be applied either soil incorporated, as a topical application, or as a high volume drench treatment.

Soil Incorporation: Incorporate the appropriate volume of Wisdom Flowable (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. The applications are based on the dry bulk density of the potting media. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

Recommended Soil Incorporation Rate of Wisdom Flowable for Control of IFA in Potting Media

| Potting Media Bulk Density (lbs cubic yard) | Fluid Ounces of Wisdom Flowable in one cubic yard |
|---|---|
| 200 | 1.9 |
| 400 | 3.8 |
| 600 | 5.7 |
| 800 | 7.6 |
| 1000 | 9.5 |
| 1200 | 11.4 |
| 1400 | 13.3 |

Use proportional amounts of Wisdom Flowable for potting media with bulk densities not listed.

Topical Application: Mix Wisdom Flowable in 1,000 ounces of water based on container size and bulk density of the potting media (see table below). Apply one (1) ounce of the mix to each container evenly distributed over the surface of the potting media. Irrigate all treated containers with 1.5 inches of water following application. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

Recommended Topical Drench Application Rate of Wisdom Flowable for Control of IFA in Potting Media

| Potting Media Bulk Density (lbs cubic yard) | Fluid Ounces of Wisdom Flowable Per 1,000 ounces of water | |
|---|---|-----------------|
| | 3 Qt. Container | 4 Qt. Container |
| 200 | 3.6 | 5.2 |
| 400 | 7.2 | 10.4 |
| 600 | 10.8 | 15.6 |
| 800 | 14.4 | 20.8 |
| 1000 | 18.0 | 26.0 |
| 1200 | 21.6 | 31.2 |
| 1400 | 25.2 | 36.4 |

Use proportional amounts of Wisdom Flowable for potting media with bulk densities not listed.

High Volume Drench: Apply Wisdom Flowable as a high volume drench by mixing the appropriate amount of product based on the bulk density in 100 gallons of water (see table below). Apply mix to individual containers to the point of saturation. The amount of mix used for each plant is generally 1/5 the volume of the container. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

Recommended High Drench Application Rate of Wisdom Flowable for Control of IFA in Potting Media

| Potting Media Bulk Density (lbs cubic yard) | Fluid Ounces of Wisdom Flowable in 100 Gallons |
|---|--|
| 200 | 2.4 |
| 400 | 4.8 |
| 600 | 7.2 |
| 800 | 9.6 |
| 1000 | 12.0 |
| 1200 | 14.4 |
| 1400 | 16.8 |

Use proportional amounts of Wisdom Flowable for potting media with bulk densities not listed.

Larval Control In Potting Media of Containerized Plants

Black Vine Weevil Larval Control – Preventative Treatment – Topical Drench: For preventative control of black vine weevil larvae in containerized plants, dilute Wisdom Flowable at the rate of 10 to 40 fl. ozs. (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Diluting 10 fluid ounces of Wisdom Flowable per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide black vine weevil larval control for one growing season when the application is made in the spring. Diluting 20 to 40 fluid ounces of Wisdom Flowable per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide black vine weevil larval control for two growing seasons when the application is made in the spring.

White Grub Control – Preventative Treatment – Topical Drench: For preventative control of white grubs (including, but not limited to, Japanese beetle, oriental beetle and European chafer) in containerized plants, dilute Wisdom Flowable at the rate of 40 to 80 fl. ozs. (0.2 to 0.4 lb AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Use the higher application rate for a longer period of control.

Black Vine Weevil and White Grub Larval Control – Preventative Treatment – Media Incorporation: For preventative control of black vine weevil and white grub larvae in containerized plants, incorporate the appropriate volume of Wisdom Flowable (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. Use the higher application rates for longer periods of control.

| Potting Media Bulk Density (lbs. per cubic yard) | Fluid Ounces of Wisdom Flowable in one cubic yard | | | |
|--|---|--------|--------|--------|
| | 10 PPM | 15 PPM | 20 PPM | 25 PPM |
| 200 | 0.4 | 0.6 | 0.8 | 1.0 |
| 300 | 0.6 | 0.9 | 1.2 | 1.5 |
| 400 | 0.8 | 1.2 | 1.6 | 2.0 |
| 500 | 1.0 | 1.5 | 2.0 | 2.5 |
| 600 | 1.2 | 1.8 | 2.4 | 3.0 |
| 700 | 1.4 | 2.1 | 2.8 | 3.5 |
| 800 | 1.6 | 2.4 | 3.2 | 4.0 |
| 900 | 1.8 | 2.7 | 3.6 | 4.5 |
| 1000 | 2.0 | 3.0 | 4.0 | 5.0 |

The application rates listed above are based on the dry bulk density of the potting media. Use proportional volumes of Wisdom Flowable for potting media with dry bulk densities that are not listed above.

Black Vine Weevil Larval Control – Curative Treatment – Topical Drench: To control black vine weevil larvae infesting containerized plants, dilute Wisdom Flowable at the rate of 10 to 40 fl. ozs. (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

Bare-root Treatment of Preventative Root Weevil Larval Control: To protect treated roots of field grown nursery stock from feeding by rootweevil larvae, dilute one gallon of Wisdom Flowable in 100 gallons of water and treat the bare roots of plants that are being transplanted into the field either by dipping the roots into the insecticide solution for ten seconds or by spraying the insecticide solution onto the roots.

Diaprepes Weevil Larval Control – Curative Treatment – Topical Drench: To control *Diaprepes* weevil larvae infesting containerized plants, dilute Wisdom Flowable at the rate of 10 to 40 fl. ozs. (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

12/13

Fungus Gnat Larval Control – Preventative Treatment – Topical Drench: For preventative control of fungus gnat larvae in containerized plants, dilute Wisdom Flowable at the rate of 20 to 40 fl. ozs. (0.1 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fl. ozs. of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for container less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Use the higher application rate for a longer period of control.

Fungus Gnat Larval Control – Curative Treatment – Topical Drench: To control fungus gnat larvae infesting containerized plants, dilute Wisdom Flowable at the rate of 10 to 40 fl. ozs. (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

STORAGE AND DISPOSAL

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, replace lids and close tightly. Do not put concentrate or dilute material into food or drink container.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call AMVAC: 1-323-264-3910.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Do not contaminate water, food or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for Guidance.

CONTAINER DISPOSAL: Plastic Container: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE FULLEST EXTENT PERMITTED BY LAW MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

Wisdom is a trademark of AMVAC Chemical Corporation.

AMVAC Chemical Corporation
4100 E. Washington Boulevard
Los Angeles, CA 90023 U.S.A.
1-323-264-3910
www.amvac-chemical.com

Supplemental Label

13/13

RESTRICTED USE PESTICIDE

Toxic to Fish and Aquatic Organisms

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

WISDOMTM FLOWABLE

ADDITIONAL PERSONAL PROTECTIVE EQUIPMENT AND EXTENDED REAPPLICATION INTERVALS REQUIREMENTS FOR GREENHOUSE USE IN CALIFORNIA

EPA REG. NO. 5481-519

DIRECTIONS FOR USE RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This supplemental labeling must be in possession of all users of the product in greenhouses in California.

CALIFORNIA SPECIFIC REQUIREMENTS FOR GREENHOUSE APPLICATORS AND HARVESTERS.

In addition to following all applicable precautionary statements on the label on the product container, the following is required for greenhouse applicators and harvesters:

Greenhouse Applicator: Greenhouse applicators must wear a full body chemical-resistant protective suit (such as barrier laminate, butyl rubber, nitrile rubber, polyvinyl chloride, or equivalent).

Reapplication Interval: Reapplications to greenhouses must be at intervals of 30 days or longer.

Greenhouse Harvesters: Greenhouse harvesters must wear either regular-length gloves plus a long-sleeved shirt or elbow-length (gauntlet type) gloves during the 30 days following application.

PLEASE REFER TO CONTAINER LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS. FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE CONTAINER LABEL.

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