

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 1, 2019

P. Leanne Pruett Agent for Tessenderlo Kerley, Inc. Pyxis Regulatory Consulting 4110 136th St. CT NW Gig Harbor, WA 98332

Subject: Registration Review Label Mitigation for Fosetyl-Al Product Name: Flagstick EPA Registration Number: 61842-10 Application Date: October 7, 2016 Decision Number: 555903

Dear P. Leanne Pruett:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Fosetyl-Al Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

Page 2 of 2 EPA Reg. No. 61842-10 Decision No. 555903

If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at <u>Stanton.Darius@EPA.gov</u>.

Sincerely,

< 2 ~ 2

Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

## ACCEPTED

## Nov 01, 2019

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

EPA Reg. No. 61842-10

# **FlagStick**<sup>®</sup>

FOSETYL-AL GROUP P07 FUNGICIDE

[Alternate Brand Names: Flagstick Fungicide 70 DF, Autograph, Novasource 70% WDG Turf Fungicide; ArmorTech ALT 70 WDG, Gimme]

#### **ACTIVE INGREDIENT:**

Aluminum tris (O-ethyl phosphonate)	70.0%
OTHER INGRÈDIENTS:	
TOTAL	100.0%

FlagStick<sup>®</sup> contains aluminum tris (O-ethyl phosphonate), the same active ingredient found in Chipco<sup>®</sup> Signature<sup>®</sup>.

### KEEP OUT OF REACH OF CHILDREN WARNING – AVISO

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

FIRST AID				
If in eyes:	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.			
lf on skin or	Take off contaminated clothing.			
clothing:	Rinse skin immediately with plenty of water for 15-20 minutes.			
	Call a poison control center or doctor for treatment advice.			
If swallowed:	Call a poison control center or doctor immediately for treatment advice.			
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>			
	• Do not induce vomiting unless told to do so by the poison control center or doctor.			
	Do not give anything by mouth to an unconscious person.			
If inhaled:	Move person to fresh air.			
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration,			
	preferably by mouth-to-mouth, if possible.			
	Call a poison control center or doctor for further treatment advice.			
HOT LINE NUMBER				
Have the product container or label with you when calling a poison control center or doctor, or going for				
tractment. Vou may also contact 1,000,077,1727 for amorgonal madical tractment information				

treatment. You may also contact 1-800-877-1737 for emergency medical treatment information.

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through the skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin.

#### EPA Reg. No. 61842-10

EPA Est. No.

Manufactured for:

Tessenderlo Kerley, Inc. 2255 North 44<sup>th</sup> Street, Suite 300 Phoenix, AZ 85008-3279 1-888-732-8246

#### **Net Weight:**

#### 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 A on an EPA chemical-resistant category selection chart. Applicators and other handlers must wear long-sleeved shirt and long pants, chemical resistance gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes plus socks, and protective eyewear.

#### USER SAFETY REQUIREMENTS

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

#### **ENGINEERING CONTROLS**

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

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic and estuarine invertebrates. Drift and runoff may be hazardous to aquatic and estuarine organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

#### USER SAFETY RECOMMENDATIONS

Users should:

#### • Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. 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.

FlagStick is for use on ornamentals and bedding plants grown in field nurseries, greenhouses, and landscaping and conifer nurseries, phytophthora root rot prevention for conifers in nurseries, downy mildew control in roses, fire blight suppression in ornamental pear, pyracantha and hawthorn, bacterial blight suppression in English ivy, schefflera, anthurium, dieffenbachia, spathaphyllum, syngonium, and ficus to suppress *Xanthomonas campestris* pathovars *hederae, dieffenbachiae, syngonii,* and *fici* and on turf (golf courses, sod farms, and industrial or municipal turf areas).

#### AGRICULTURAL USE REQUIREMENTS

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

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

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical-resistant gloves made of any waterproof material, shoes plus socks, and protective eyewear (such as goggles, face shield or safety mask).

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treated areas until sprays have dried.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container and keep tightly closed. Store in a cool dry place.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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

When applying, use spray nozzles that will deliver fine or larger spray droplets as defined in the American Society of Agricultural and Biological Engineers (ASABE) standard ANSI/ASAE S572.1 (March 2009).

#### CHEMIGATION

#### APPLICATION DIRECTIONS THROUGH SPRINKLER AND DRIP IRRIGATION SYSTEMS

Apply this product only through sprinkler irrigation systems including microjet, drip, solid set and center pivot. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can 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 pesticide label-prescribed safety devices for public water systems are in

place.

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

**SET UP:** Clean all tanks, hoses, fittings and other parts of the injector system. Be sure to remove residues of prior applications, salt residues or other foreign substances. Flush using clean water.

**APPLICATION INSTRUCTIONS:** First mix **FlagStick** in a tank filled with 1/2 to 3/4 the prescribed amount of water. Begin agitation. Add **FlagStick** to the tank, and then add the remaining volume of water. Set sprinkler to irrigate 0.1 to 0.3 inch of water per acre. Start sprinkler and inject the concentrated mixture of **FlagStick** into the irrigation system near the end of the irrigation cycle checking to be sure the proper rate per acre is being applied. The **FlagStick** mixture should be injected using a positive displacement pump into the main line in front of a right angle turn to achieve proper incorporation. Stop the injection equipment after treatment is completed and continue to operate the irrigation system until all of the **FlagStick** mixture has been cleared from the last sprinkler head.

If you should have any other questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**NOTE: For Microjet and Drip Irrigation Systems:** After treatment with **FlagStick** has been completed, prevent additional irrigation for 24 to 48 hours.

For Solid Set and Center Pivot Irrigation Systems: After treatment with FlagStick has been completed, prevent additional irrigation until foliage is dry to avoid washing FlagStick off the plants.

#### SPECIFIC REQUIREMENTS FOR SPRINKLER AND DRIP IRRIGATION SYSTEMS

## Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension.

- 1. 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. 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.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### SPECIFIC REQUIREMENTS FOR CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- 4. 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.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, FlagStick contains a Group P07 fungicide. Any fungal population may contain individuals naturally resistant to FlagStick and other Group P07 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of FlagStick or other Group P07 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.

#### ORNAMENTALS AND BEDDING PLANTS

**FlagStick** may be applied to ornamentals and bedding plants grown in field nurseries, greenhouses, and landscaping and conifer nurseries for the control of diseases caused by Pythium and Phytophthora. **FlagStick** may also be used to control downy mildew and fire blight and for the suppression of bacterial blight caused by certain pathovars of *Xanthomonas campestris*.

For best results application of **FlagStick** must be made before disease develops. Apply when conditions favor disease development and follow sound IPM and cultural management practices. When diseases pressure is severe, use higher rates. Plant injury may occur if specified rates are exceeded or applications are made at more frequent intervals than listed here.

#### PLANT TOLERANCE

• Plant tolerances to **FlagStick** have been found to be acceptable in the specific genera and species listed on this label. There are far too many species and varieties of ornamental plants to determine the plant

tolerance of every one to **FlagStick**. If using **FlagStick** for the first time or plant tolerance is not known, test for possible phytotoxicity by treating a small area at the specified rate. Wait 3-7 days and inspect for visual damage. If damage is present, do not use.

#### ORNAMENTAL AND BEDDING PLANT TANK MIXTURES

ALWAYS READ AND FOLLOW THE LABEL DIRECTIONS OF ALL TANK MIX COMPONENTS.

Observe the most restrictive label limitations and precautions and do not exceed the label rates. Do not tank mix with products which prohibit tank mixing.

Additional Disease Control: FlagStick is compatible with most commonly used fungicides and thus may be tank mixed with fungicides labeled for control of additional diseases. For control of diseases such as Aerial Web Blight, Alternaria Leaf Blight, Botrytis Blight, Fusarium Leaf Spot, Helminthosporium Leaf Spot, and Ray Blight, FlagStick can be tank-mixed with other fungicides labeled for control of these diseases.

If a tank-mix with other fungicides is used, follow label directions for the use of that product and apply at the specified rate for control of the target disease organism. **FlagStick** is not physically compatible with some flowable formulations of pesticides such as chlorothalonil or mancozeb fungicides. These products must NOT be combined for application.

#### COMPATIBILITY

Do NOT tank-mix **FlagStick** with copper compounds. Tessenderlo Kerley Inc. has determined that the mixing of copper containing compounds with **FlagStick** may cause phytotoxicity. In addition, the application of **FlagStick** to foliage with copper residues may cause phytotoxicity from solubilized copper on the leaf surface. Allow at least a 14 day interval between applications of **FlagStick** and any copper based products

FlagStick may not be compatible with foliar fertilzers.

• Some adjuvants such as stickers, wetting agents and those that enhance pesticide leaf penetration may not be compatible or may cause phytotoxicity when mixed with **FlagStick**.

To test the mixing compatibility of **FlagStick** with any tank mix partner, conduct a "jar test" by mixing a small amount of the tank mix components in a small container. Mix the ingredients with water in the concentration, and in the order of addition desired for the final spray application. Wait 15 minutes. Check for any indication of incompatibility such as separation or curdling. If any indication of incompatibility exists, do not use this application mixture.

#### ORNAMENTALS

<u>FOLIAR APPLICATIONS</u> to Aglaonema, Aphelandra, Azalea, Bougainvillea, Boxwood, *Cattelya skinneri*, Cissus, Dieffenbachia, Hibiscus, Juniper, Leather-leaf Fern, Pittosporum, Philodendron, Pothos, Rhododendron, Spathiphyllum and Taxus media.

Use Restrictions:

- Do NOT apply more than 400 gallons of spray solution per acre.
- Do NOT apply more than 144 lbs. of active ingredient per acre per year.
- Do NOT make more than one application every 30 days.
- Do not make more than 11 applications per year
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

Application Instructions: Mix 2.85 - 5.7 lbs. of **FlagStick** with 100 gallons of water and spray to wet. When using a spray solution of less than 100 gallons per acre, be sure to apply at least 2.5 - 5.0 lbs. of **FlagStick** per acre. Make repeat applications as necessary to control disease but do not apply more than one spray every 30 days.

<u>DRENCH APPLICATIONS</u> to Aphelandra, Azalea, Boxwood, Cissus, Dieffenbachia, Japanese Holly, Juniper, Monterey Pine, Philodendron, Pieris, Pittosporum, Rhododendron, Schefflera, Spathiphyllum, and Taxus media.

Use Restrictions:

- Do NOT apply more than once every 30 days.
- Do not make more than 4 applications per year

Application Instructions: Mix 0.46 - 0.91 lbs. (7.4 - 14.6 oz.) of **FlagStick** with 100 gallons of water and apply to 400 sq. ft. (2 pints of solution per sq. ft.). Repeat as necessary to control disease. Do not apply more than one spray every 30 days.

<u>SOIL INCORPORATION</u> to Rhododendron, Azalea, or Pieris for control of Phytophthora species **only**. Use Precautions:

• Incorporate **FlagStick** in to soil media. Use for plants with established root systems only

Application Instructions: Immediately before potting, mix 0.57 - 0.91 lbs. (9.1 – 14.6 oz.) of **FlagStick** per cubic yard of soil mix. Further applications as a foliar spray or drench may be made as needed. Do NOT make more than one application every 30 days.

#### **BEDDING PLANTS**

FOLIAR APPLICATIONS to Begonia, Pansy, Vinca, Marigold, Zinnia, Petunia, Geranium, and Impatiens.

Use Restrictions:

- Do NOT apply more than 400 gallons spray per acre.
- Do NOT make more than one application every 14 days.
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

Application Instructions: Mix 1.4 – 4.6 lbs. of **FlagStick** with 100 gallons of water and spray to wet. Repeat as necessary. Do NOT apply more than once every fourteen days.

#### PHYTOPHTHORA ROOT ROT PREVENTION FOR CONIFERS IN NURSERIES

#### NOTE: This type of application is NOT registered for use in California.

DIP TREATMENTS to conifers such as Douglas fir, spruce, and pines.

Use Precautions: Be sure to wear chemical/water resistant gloves, goggles or face shield, long pants (coveralls), long sleeved shirt, shoes, and socks when making dip applications.

Application Instructions: Thoroughly immerse plant , including roots by dipping transplants in a solution of 2.5 lbs. of **FlagStick** per 100 gallons of water. Dip immediately before transplanting.

Use Restrictions:

- Do not make more than 9 applications per year
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

FOLIAR APPLICATIONS to conifers such as Douglas fir, spruce, and pines.

Application Instructions: Mix 2.85 – 5.7 lbs. of **FlagStick** with 100 gallons of water and spray to wet. When using a spray solution of less than 100 gallons per acre be sure to apply at least 2.5 - 5.0 lbs. of **FlagStick** per acre. Make repeat applications as necessary to control disease but do not apply more than one spray every 30 days.

Use Restrictions:

- Do not make more than 9 applications per year
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

#### DOWNY MILDEW CONTROL IN ROSES

<u>FOLIAR APPLICATIONS</u> to field, container, landscape and mini varieties to control downy mildew (*Peronospora sparsa*). NOTE: Follow sound disease sanitation practices to reduce the spread of disease.

Use Restrictions:

- Do NOT apply more than 400 gallons of spray solution per acre.
- Do NOT make more than one application every seven days.
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

Application Instructions: Mix 2.85 lbs. of **FlagStick** with 100 gallons of water and spray to wet. When using a spray solution of less than 100 gallons per acre, be sure to apply at least 2.5 - 5.0 lbs. of **FlagStick** per acre. Repeat as necessary but do NOT make more than one spray every seven days.

<u>FOLIAR APPLICATIONS</u> to ornamental pear, pyracantha, and hawthorn. Apply before disease is present. **FlagStick** works only as a preventive treatment in this type of application. NOTE: Follow sound disease sanitation practices to reduce the spread of disease.

Use Restrictions:

- Do NOT apply more than 400 gallons of spray solution per acre.
- Do NOT make more than one application every seven days.
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

Application Instructions: Mix 2.85 lbs. of **FlagStick** in 100 gallons of water and spray to wet. If applying less than 100 gallons of spray solution per acre, then apply 2.5 - 5.0 lbs. of **FlagStick** per acre. Start applications at the pre-bloom stage and reapply at 7-day intervals throughout the bloom period

If tank mixing **FlagStick** be sure to read the compatibility statements at the beginning of this section.

#### BACTERIAL BLIGHT SUPPRESSION

#### NOTE: This type of application is NOT registered for use in California.

<u>FOLIAR APPLICATIONS</u> to English ivy, schefflera, anthurium, dieffenbachia, spathaphyllum, syngonium, and ficus to suppress *Xanthomonas campestris* pathovars *hederae*, *dieffenbachiae*, *syngonii*, and *fici*. NOTE: Follow sound disease sanitation practices to reduce the spread of disease.

Use Restrictions:

- Do NOT apply more than 400 gallons of spray solution per acre.
- Do NOT make more than one application every seven days.
- Do not apply more than 11 applications per year
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

Application Instructions: Mix 2.3 - 4.6 lbs. of **FlagStick** with 100 gallons of water and spray to wet. When using a spray solution of less than 100 gallons per acre, be sure to apply at least 2.5 - 5.0 lbs. of **FlagStick** per acre. Make repeat applications as necessary but do NOT make more than one application every 7 days.

If tank mixing **FlagStick** be sure to read the compatibility statements at the beginning of this section.

#### TURF

#### NOTE: DO NOT apply to home or residential lawns.

**FlagStick** is a fungicide that works systemically. Use in an integrated pest management (IPM) program for the control of Pythium diseases (such as blight and root rot, and yellow tuft) on turf grass in golf courses, sod farms and other commercial turf areas. Because **FlagStick** contains fosetyl al, a known inducer of systemic acquired resistance (SAR) in plants, **FlagStick** assists in the development of thick, vigorous turf. Turf treated with **FlagStick** can better withstand plant stresses such as heat, humidity, drying winds, and excessive traffic, which can damage turf. **FlagStick** aids the turf's natural ability to resist disease. Plus, a thick healthy turf reduces the likelihood of other pests such as weeds and algae from developing.

#### **Use Restrictions:**

- Do not graze animals on treated turf.
- Do not apply more than 144 lbs. of active ingredient per acre per year.
- Do not feed clippings from treated turf to livestock and poultry.
- Do not mow and/or water treated areas until foliage is completely dry.
- On sod farms, do not make more than 11 applications per year
- On golf courses, do not make more than 8 applications per year
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

**Application Instructions:** Begin using **FlagStick** when environmental conditions favor disease development and repeat applications as specified in the table below. Apply as a foliar spray at the rate specified below in 1 - 5 gallons of water per 1,000 sq. ft. Use an accurately calibrated sprayer and agitate while mixing and spraying.

Application Interval	Application Rate (Oz. per 1,000 S q. Ft.)	
14 days	4.6	
21 days	9.1	

#### COMPATIBILITY

NOTE: Do NOT mix FlagStick with any surfactant, sticker, adjuvant or wetting agent.

**FlagStick** may not be chemically compatible with foliar fertilizers or copper based fungicides. Mixing with these products may result in phytotoxicity. **FlagStick** is NOT physically compatible with flowable formulations of certain pesticides such as Daconil 2787<sup>®</sup> (chlorothalonil) or Fore<sup>®</sup> fungicides (mancozeb), Bayleton<sup>®</sup> 50W (triadimefon), Rubigan<sup>™</sup> A.S. (fenarimol) and Spectro<sup>™</sup> 90 WDG (chlorothalonil plus thiophanate-methyl). Do not use these products in tank mixes with **FlagStick**.

To determine the physical compatibility of **FlagStick** with another product, conduct a "jar test" by mixing a small amount of the tank mix components in a small container. Mix the ingredients with water in the concentration, and in the order of addition desired for the final spray application. Wait 15 minutes. Check for any indication of incompatibility such as separation or curdling. If any indication of incompatibility exists, do not use this application mixture. Be sure to read and follow all directions and precautions on this label and on the labels of any tank mix partner products.

#### TANK MIXTURES FOR TURF DISEASES

Follow the most restrictive of label limitations and precautions and do not exceed label dosage rates.

Do NOT mix FlagStick with any product which prohibits mixing on its label.

**Summer Stress Complex / Summer Decline: FlagStick** may be used in a tank mix with products labeled to control Summer Stress Complex / Summer Decline caused by a complex of *Pythium* and *Rhizoctonia* 

diseases on common turf grass on golf courses, sod farms, industrial or municipal turf areas.

**Anthracnose: FlagStick** may be used in a tank mix with products labeled for use on common turf grass on golf courses, sod farms, and industrial or municipal turf areas for control of anthracnose. For best results use a preventative program with repeated applications every 14 days. Begin application during conditions conducive for disease development and before symptoms appear.

**Bentgrass Deadspot:** FlagStick may be used in a tank mix with products used to control bentgrass deadspot in common turf grass on golf courses, sod farms, and industrial or municipal turf areas. For best results use a preventative program with repeated applications every 14 days. Begin application during conditions conducive for disease development and before symptoms appear.

# [Note to Reviewer: Text and table appearing on this page are OPTIONAL language and may not appear on final product labeling. If "TANK MIXTURES FOR TURF DISEASES" text from previous page appears on final label, language on this page will not appear on final label.]

#### TANK MIXTURES FOR TURF DISEASES

**Summer Stress Complex / Summer Decline: FlagStick** may be used in a tank mix with products labeled to control Summer Stress Complex / Summer Decline caused by a complex of *Pythium* and *Rhizoctonia* diseases on common turf grass on golf courses, sod farms, industrial or municipal turf areas (see partial list below). Do NOT mix **FlagStick** with any product which prohibits mixing on its label.

**Anthracnose: FlagStick** may be used in a tank mix with products labeled for use on common turf grass on golf courses, sod farms, and industrial or municipal turf areas for control of anthracnose (see partial list below). For best results use a preventative program with repeated applications every 14 days. Begin application during conditions conducive for disease development and before symptoms appear. Be sure to follow the most restrictive of label limitations and precautions and do not exceed label dosage rates.

**Bentgrass Deadspot:** FlagStick may be used in a tank mix with products used to control bentgrass deadspot in common turf grass on golf courses, sod farms, and industrial or municipal turf areas (see partial list below). For best results use a preventative program with repeated applications every 14 days. Begin application during conditions conducive for disease development and before symptoms appear. Be sure to follow the most restrictive of label limitations and precautions and do not exceed label dosage rates.

		Application Rate	
Disease Treated	Tank Mix Partner	(Oz. / 1,000 FT <sup>2</sup> )	Application Interval
	FlagStick	4.6 – 9.1	
	+	+	
	26GT™	3.0 - 4.0	
	(iprodione)		
	or	or	
	Daconil Ultrex <sup>®</sup>	3.3	
	(chlorothalonil)		
	or	or	
	Dithane <sup>®</sup> DF Rainshield™ (mancozeb)	8.0	
Summer Stress Complex <sup>‡</sup>	or	or	
(Pythium, Anthracnose,	Protect DF	8.0	
and <i>Rhizoctonia</i> spp. <i>)</i>	(mancozeb)		
	or	or	
and/or	Mancozeb DG	8.0	14 days
A settle use a set a set	(mancozeb)		
Anthracnose	or	or	
(Colletotrichum	Fore <sup>®</sup> 80 WP Rainshield™	4.0 - 8.0	
graminicola)	(mancozeb)		
	or	or	
	Heritage®	0.2 - 0.4	
	(azoxystrobin)		
	or	or	
	Banner <sup>®</sup> Maxx <sup>®</sup>	1.0 - 2.0	
	(propiconazole)		
	or	or	
	ProStar <sup>®</sup> 70 WP	1.5 - 3.0	
	(flutolanil)		

Disease Treated	Tank Mix Partner	Application Rate (Oz. / 1,000 FT <sup>2</sup> )	Application Interval
Bentgrass Deadspot (Ophiosphaerella agrostis)	FlagStick	4.6	
	+	+	
	Fore <sup>®</sup> 80 WP Rainshield™ (mancozeb)	8.0	
	or	or	
	Daconil Ultrex <sup>®</sup>	3.2	
	(chlorothalonil)		

<sup>‡</sup> The following fungicides may be substituted for the companion products listed above for use with **FlagStick** in a Summer Stress Complex disease control program: Bayleton<sup>®</sup> 50<sup>†</sup> (triadimefon), Chlorostar (chlorothalonil), Cleary's 3336<sup>™</sup> WP<sup>†</sup> (thiophanate-methyl), Cleary's 3336<sup>™</sup> F<sup>†</sup> (thiophanate-methyl), Compass<sup>™</sup> (trifloxystrobin), Equus 720 SST (chlorothalonil), Equus DF (chlorothalonil), Consyst WDG (chlorothalonil), thiophanate-methyl), Curalan<sup>®</sup> EG (vinclozolin), Daconil<sup>®</sup> Weather Stik<sup>®†</sup> (chlorothalonil), Daconil ZN<sup>®</sup> (chlorothalonil), Eagle 20EW Specialty Fungicide (myclobutanil), Echo<sup>®</sup> 90 DF (chlorothalonil), Echo<sup>®</sup> 720 Agricultural Fungicide (chlorothalonil), Endorse<sup>™</sup> (polyoxin D zinc salt), Fungo<sup>®</sup> Flo (thiophanate-methyl), Fungo<sup>®</sup> 50 WSB (thiophanate-methyl), MANhandle<sup>™</sup> (mancozeb), Manicure<sup>™</sup> 6 Flowable (chlorothalonil), Manicure<sup>™</sup> T/O Flowable (chlorothalonil), Medallion<sup>®</sup> (fludioxonil), Pentathlon<sup>®</sup> DF (mancozeb), SysStar<sup>®</sup> WDG (thiophanate-methyl), SysTec<sup>®</sup> 1998 WDG (thiophanate-methyl), Systhane<sup>®</sup> WSP (myclobutanil), Terrachlor<sup>®</sup> 75 WP (PCNB) and Terrachlor<sup>®</sup> Flowable Fungicide<sup>†</sup> (PCNB), Terraguard<sup>®</sup> 50W (triflumizole), Terrazole<sup>®</sup> 35% WP (etridiazole), Touche EG (vinclozin), Turfcide<sup>®</sup> 4F (PCNB).

<sup>†</sup>NOTE: Disperse these products in to at least a 1/2 filled tank containing water first before adding **FlagStick**.

#### Tank-Mix Mixing Instructions

The order in which products are added to tank mixes can affect **FlagStick** ability to go in to solution. Unless otherwise indicated on this label, it is preferable to add **FlagStick** to a tank which has been partially filled with water and has no other tank mix components.

If tank-mixing with other pesticides, follow the label directions for the use of the tank-mix partner product and apply at the recommended rate for control of the target disease organism. Be sure to maintain agitation while mixing and spraying.

#### WARRANTY AND LIMITATION OF DAMAGES

Tessenderlo Kerley, Inc. warrants only that this product conforms to the product description on the label. Except as warranted by this label, Tessenderlo Kerley, Inc. makes no representation or warranty or guarantee, whether expressed or implied, of fitness for a particular purpose of merchantability, or of product performance. Tessenderlo Kerley, Inc. does not authorize any agent or representative to make any such representation, warranty or guarantee. To the extent consistent with applicable law, Tessenderlo Kerley, Inc.'s maximum liability for breach of its warranty or for use of this product, regardless of the form of action, shall be limited to the purchase price of this product. To the extent consistent with applicable law, buyer and user acknowledge and assume all risks and disposal liability resulting from handling, storage, use and disposal of this product. If buyer does not agree with or accept these warranty and liability limitations, buyer may return the unopened container to the place of purchase for full refund. Buyer's use of this product shall constitute conclusive evidence of buyer's acknowledgement and acceptance of the forgoing limitations. Some states do not allow the exclusion of implied warranties or the limitation of certain damages, so the above may not apply. The purchase, delivery, acceptance and use of this product by the buyer are subject to the terms and conditions of seller's sales invoice for this product.

Bayleton<sup>®</sup> and Prostar<sup>®</sup> are registered trademarks of Bayer.

Chipco® and Signature® are registered trademarks of Bayer Crop Science LP

Compass<sup>®</sup> is a registered trademark of Bayer.

Endorse<sup>™</sup> is a trademark of Avesta.

Banner<sup>®</sup>, Maxx<sup>®</sup>, Heritage<sup>®</sup>, Daconil<sup>®</sup>, Daconil Ultrex<sup>®</sup>, Weather Stik<sup>®</sup>, Daconil Zn<sup>®</sup>, and Medallion<sup>®</sup> are registered trademarks of Syngenta.

Dithane<sup>®</sup>, Systhane<sup>®</sup> and Fore<sup>®</sup> are registered trademarks of Dow AgroSciences Company.

Manicure<sup>™</sup>, MANhandle<sup>™</sup> and Lesco<sup>™</sup> are trademarks of Lesco, Inc.

Curalan<sup>®</sup> is a registered trademark of BASF Corporation.

3336<sup>™</sup> and Spectro<sup>™</sup> are trademarks of Cleary Chemical Company.

Systec<sup>®</sup> and Systar<sup>®</sup> are registered trademarks of Regal Chemical Company.

Echo<sup>®</sup> is a registered trademark of SIPCAM AGRO USA, Inc.

Fungo<sup>®</sup> is a registered trademark of the Scotts Company. Terrachlor<sup>®</sup>, Terraguard<sup>®</sup>, Terrazole<sup>®</sup> and Turfcide<sup>®</sup> are registered trademarks of Uniroyal Chemical Company, Inc.

Pentathlon<sup>®</sup> is a registered trademark of Griffin L.L.C.

NovaSource® and FlagStick® are registered trademarks of Tessenderlo Kerley, Inc.

FlagStick® is not manufactured or distributed by Bayer Crop Science LP, seller of Chipco® Signature®.

EPA [approval date]