

100-955

11/25/2009

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



OFFICE OF  
PREVENTION, PESTICIDES,  
AND TOXIC SUBSTANCES

November 25, 2009

Fred J. Pearson  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419

Dear Mr. Pearson:

Subject: Amended labeling to increase rates and add directions for transplants  
Flagship® 25WG  
EPA Reg. No. 100-955  
EPA Decision No. 407002  
Submission dated March 5, 2009; resubmission dated November 18, 2009

The proposed labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable. A stamped copy is enclosed for your records. Please submit two copies of your final printed labeling before you release the product for shipment. Your release for shipment of the product 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(e). If you have any questions, please contact Julie Chao by phone at: (703) 308-8735, or by email at: [chao.julie@epa.gov](mailto:chao.julie@epa.gov).

Regards,

A handwritten signature in cursive script that reads "Venus Eagle".

Venus Eagle, PM01  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

Enclosure

2/26

(Booklet)

Flagship® 25WG

Insecticide

GROUP 4A INSECTICIDE

For foliar and systemic control of insect pests in ornamental plants, fruit and nut trees (non-bearing) Christmas trees, forest seedlings and listed vegetables grown for transplant.

Active Ingredient:

Thiamethoxam (CAS No. 153719-23-4) ..... 25.0%

Other Ingredients: ..... 75.0%

Total: ..... 100.0%

Flagship® 25WG is a water-dispersible granule that contains 4 oz. of active ingredient per lb. of formulated product.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use in booklet. (8 oz. and 2 lb.)

EPA Reg. 100-955

EPA Est. XXXXX

Product of XXXXX

Formulated in the USA

SCP 955A-L1(draft-d) (8 oz. booklet)

SCP 955A-L3(draft d) (2 lb.booklet)

8 ounces  
Net Weight

2 pounds  
Net Weight

ACCEPTED

NOV 25 2009

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

EPA. Reg. No: 100-955

<b>FIRST AID</b>	
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>NOTE TO PHYSICIAN</b>	
There is no specific antidote if Flagship 25WG is ingested. Induce emesis or lavage stomach. Treat symptomatically.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b>	
For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call <b>1-800-888-8372</b>	

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**PRECAUTIONARY STATEMENTS**


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**Hazards to Humans and Domestic Animals****CAUTION**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

**Personal Protective Equipment**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material – Category A (e.g., natural rubber ≥ 14 mils).
- Shoes plus socks

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

**Engineering Control Statements**

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

**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.

**Environmental Hazards**

This pesticide is toxic to wildlife and highly toxic to aquatic invertebrates. This product is highly toxic to bees exposed to direct treatment on blooming crops. Do not apply this product or allow it to drift to blooming crops while bees are foraging in/or adjacent to the treatment area.

For Terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment wash water.

- **Surface Water Advisory**

This product may impact surface water through spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via run off for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of thiamethoxam water from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours. (See manual at the following internet address:

<http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html>.)

- **Ground Water Advisory**

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

- **Spray Drift Advisory**

Do not allow this product to drift.

**Physical or Chemical Hazards**

Do not use, pour, spill or store near heat or open flame.

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**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and of Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## DIRECTIONS FOR USE

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

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

### AGRICULTURAL USE REQUIREMENTS

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

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours except for automatic fogger use in greenhouses (See "Automatic Fogger Use in Greenhouses" below).**

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 – Category A (e.g., natural rubber ≥ 14 mils).
- Shoes plus socks

#### **Automatic Cold Fogger Use in Greenhouses**

- If there is no ventilation, the REI is 24 hours.

#### **Early Entry based upon Ventilation Criteria**

- Early entry is permitted (with the PPE listed above) and respiratory protection consisting of a protection factor (PF) 10 respirator fitted with an organic-vapor removing filter) after four (4) hours to perform short duration activities such as opening windows or turning on fans or ventilation systems.
- Early entry is permitted (with the PPE listed above) after two (2) hours of ventilation using fans or other mechanical ventilation systems.
- Early entry is permitted (with the PPE listed above) after four (4) hours of ventilation using vents, windows or other passive ventilation.
- Early entry is permitted (with the PPE listed above) after ten (10) complete air exchanges have been completed.

After 12 hours, if the greenhouse has been ventilated according to the above criteria, no PPE is required to enter the treated area.

**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.

**Do not enter treated areas without protective clothing until sprays have dried.**

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

**USE INFORMATION**

Flagship 25WG is a broad-spectrum insecticide that is effective when applied at label rates to the foliage and soil. Flagship 25WG is active against many sucking and chewing insect pests by contact and ingestion.

Flagship 25WG is relatively short-lived on the surface of plant foliage, readily absorbed into plant tissues, and rainfast once it has dried. The rapid translaminar absorption and distribution within leaves provides excellent knockdown and residual control of foliar feeding insects.

In the soil, the active ingredient in Flagship 25WG will control soil pests upon contact or ingestion and is also readily taken up by plant roots. The active ingredient moves upwards in the plant to the site of pest infestation. Through feeding on the plant, pests are exposed to the active ingredient in Flagship 25WG. Feeding will stop within minutes to hours of exposure, followed by death of the pest. The moderate persistence of Flagship 25WG in the soil and foliage also provides residual control of labeled pests.

**Resistance Management**

Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Syngenta encourages responsible product stewardship to ensure effective long-term control of the insects on this label.

Flagship 25WG contains a Group 4A insecticide (thiamethoxam, belonging to the neonicotinoid class of chemistry). Insect biotypes with acquired or inherent resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species. This may result in partial or total loss of control of those species by Flagship 25WG or other Group 4A insecticides.

**In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential:**



- Do not use a block of more than three consecutive applications of Flagship 25WG and/or other Group 4A insecticides. (Do not exceed the allowable amount of Flagship 25WG per acre per growing season.)
- Following a block of Group 4A insecticides, rotate to a block of applications of effective products with a different mode of action before using additional applications of Group 4A insecticides.
- Using a block rotation, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect's pest's ability to develop resistance to this class of chemistry.
- Do not use foliar applications of Flagship 25WG or other Group 4A insecticides on crops previously treated with a long-residual, seed or soil applied Group 4A insecticides.

**Other Insect Resistance Management (IRM) practices include:**

- Incorporating IPM techniques into your insect control program.
- Monitoring treated insect populations for loss of field efficacy.
- Using tank-mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same crop outlet and effective rates are applied.

**For additional information on Insect Resistance Management:**

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.irac-online.org/>.

**Plant Safety**

Flagship 25WG is safe on most ornamental plants. To determine the plant safety of mixtures of Flagship 25WG with other products, or if you do not have experience with a particular tank mix or with Flagship 25WG applied alone to a particular plant, test Flagship 25WG or the mixture on a small number of plants to determine any adverse plant safety effects before making large scale applications to a greater number of plants.

Among container-grown ornamentals and ornamentals grown in planting or liner beds, some plant species may be sensitive to fertilizers. Do not tank mix Flagship 25WG with fertilizers for treatment of these plants grown under these conditions.

Applications of Flagship 25WG to varieties of Yellow Honey Locust may result in leaf chlorosis and leaf abscission. Although the effects are temporary, do not use Flagship 25WG on Yellow Honey Locust varieties.

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**MIXING PROCEDURES**

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Prepare only the amount of spray mixture that is needed for the immediate application. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the spraying operation.

Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

### **Flagship 25WG Alone**

Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the Flagship 25WG to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Flagship 25WG has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

### **Tank Mix Compatibility**

Flagship 25WG is compatible with most insecticide, fungicide, and foliar nutrients products. However, test the physical compatibility of Flagship 25WG with tank-mix partners before use. To determine the physical compatibility of Flagship 25WG with other products, use a jar test, as described below.

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

### **Flagship 25WG + Tank Mixtures**

Add 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. Add the tank mix partners in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables) such as Flagship 25WG, liquid flowables, liquids and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all the mixture has been applied.

**Note:** When using Flagship 25WG in tank mixtures, add all products in water-soluble packaging to the tank before any other tank mix partner, including Flagship 25WG. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using Flagship 25WG in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. Do not exceed any label dosage rate, and follow the most restrictive label precautions and limitations. Do not mix this product with any product, which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

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## **APPLICATION PROCEDURES**

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### **Foliar Applications**

Make foliar applications in an adequate water volume to achieve thorough and uniform coverage without excessive runoff (to drip). On hard to wet plants, spray adjuvants that improve wetting of foliage are recommended. Do not use spray adjuvants that may bind Flagship 25WG

to the leaf surface, which would limit absorption into the foliage. Flagship 25WG can be applied in a range of spray volumes (concentrate to dilute spray volumes), provided thorough and uniform coverage is obtained.

### **Handheld Application Equipment**

Applications can be made through most types of low pressure handheld application equipment.

**DO NOT** apply through any type of handheld fogger equipment.

### **Automatic Cold Fogger Applications – Greenhouses**

Applications can be made in greenhouses with automatic cold fogger equipment (such as the Damm AutoFog). Apply the same amount of Flagship 25WG per unit area as would be applied in a dilute spray volume over the same area.

**Do not** apply through fogger equipment requiring workers to be present in the greenhouse during the fogger application.

**Important:** Read and follow the REI and PPE requirements for “Automatic Cold Fogger Use in Greenhouses” in the Worker Protection Standard **AGRICULTURAL USE REQUIREMENTS** box.

### **Soil or Soil-less Medium Applications**

Flagship 25WG is effective as a soil and systemic insecticide when applied to the soil using band, broadcast or drench applications. When applying Flagship 25WG as a drench, apply enough solution to sufficiently wet  $\frac{1}{2}$  -  $\frac{3}{4}$  of the root zone without allowing runoff out of the container. With irrigation or rainfall, move Flagship 25WG into the root zone of plants or the location of soil-dwelling pests, preferably within 3 days of treatment and, optimally, within 24 hours. Excessive watering or heavy rainfall may reduce the effectiveness of Flagship 25WG. Allow a minimum of 7 days after watering-in for maximum uptake of Flagship 25WG by the plant's root system.

Do not apply to soils or growing media above field or pot capacity. Do not apply to waterlogged soil or growing media.

### **Application Timing**

Begin foliar applications when labeled pests first appear or when economic thresholds have been reached.

For applications made to growing media (soil or soil-less media), Flagship 25WG must move to the feeding site of the target pest, whether this is in the root zone or the above ground portion of the host plant. Therefore, control of pests from the systemic activity of Flagship 25WG may be delayed for 1 or more weeks depending on plant size, rate of uptake from the soil, or rate of translocation within the plant, etc.

Systemic activity in large plants such as those in field nurseries or Christmas tree plantations may require several weeks to months before control of stem and foliar pests is achieved. If

economic thresholds for target pests are low, or plants are historically damaged, apply Flagship 25WG to the growing media (soil or soil-less media) to help prevent pests.

### **Application Through Irrigation Systems**

Apply Flagship 25WG only through micro-irrigation systems (for example, drip, trickle, spaghetti tubes, and micro-sprinklers), overhead irrigation, ebb and flood irrigation, or hand held or motorized calibrated irrigation equipment. Do not apply this product through any other type of irrigation equipment. Allow a minimum of 7 days after watering-in for maximum uptake of Flagship 25WG by the plant's root system. See additional precautions regarding irrigation system application below.

### **Chemigation**

**Uniform Water Distribution and System Calibration:** The irrigation system must provide uniform distribution of treated water. Plant injury, lack of effectiveness, or illegal pesticide residues in the plant can result from non-uniform distribution of treated water.

The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufactures 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.

**Chemigation Monitoring:** 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.

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

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

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

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

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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

**Specific Instructions for Public Water Systems**

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.

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.

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

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

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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

**Ebb and Flood Application**

To determine the water volume uptake of Flagship 25WG in ebb and flood applications, bring a minimum of 10 plants up to a known field capacity and allow them to dry out for one to two days. Re-wet these plants to determine how much water on average each plant will absorb to bring it back to field capacity. Use the water volume absorbed per plant, multiply by the number of pots of the same size being treated, and add the minimum water volume to irrigate the area. This should minimize the return back to the storage tank. Re-use the returned volume with subsequent irrigation or nutrients on the same plants.

## **Aerial Application**

For application to ornamental field nurseries, forest seed/seedling field nurseries or Christmas trees.

Apply Flagship 25WG in water. Increase spray volume where practical to improve coverage. Do not make applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

## **Spray Drift Precautions and Restrictions**

Do not allow spray to drift onto adjacent land, crops, or aquatic areas. As with all crop protection products, it is important to avoid off-target movement. Follow these precautions and restrictions to avoid spray drift:

- Do not apply when wind velocity exceeds 10 mph. Make applications when wind velocity favors on-target product deposition (approximately 3-10 mph). Do not apply when wind gusts approach 10 mph.
- To reduce risk of exposure to sensitive aquatic areas, do not make applications when wind direction is toward the aquatic area.
- Do not cultivate or plant crops within 25 ft. of the aquatic area as to allow growth of a vegetative filter strip.
- Do not make applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with increased height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
- Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift, and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage. Avoid applications more than 10 ft. above the crop canopy.
- For aerial applications, mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length must be used and must not exceed 75% of wing span or rotor diameter.

**SPECIFIC USE DIRECTIONS**

**Foliar Applications**

Ornamental plants, fruit and nut trees (non-bearing), Christmas trees, and forest seedlings grown in greenhouses, lath and shadehouses, containers, field nurseries and interiorscapes.

Pests	Rate	Use Restrictions
Ants (excluding harvester, carpenter and pharaoh ants) Aphids	2-4 oz./100 gal. or 4-8 oz./A	Make the first application when economic action levels for the target pest are reached. For crops without action levels, make the first application before pest populations cause significant damage to the host plant. Re-apply as needed, but no sooner than every 7 days.
Adelgids (including Hemlock Woolly Adelgid) Lace Bugs Leaf Beetles Leafhoppers Leafminer Leaf gall forming insects Mealybugs Midges Plant Bug Psyllids (including Asian Citrus Psyllid) Sawflies Soft Scales Thrips – foliar feeding Whiteflies	4-8.5 oz./100 gal. or 8-17 oz./A	Apply higher use rates in rate range for longer control or high insect populations.  For leaf gall forming insects, apply during egg laying of the generation being targeted.  For black vine weevil, apply to foliage of plants when adult feeding damage is first observed. Make only one application per generation.  For concentrated spray volumes, apply the same amount of product per unit area as would be applied with dilute spray volumes.
Black vine weevil (adult)	8.0 oz./100 gal. or 17 oz./A or 2 oz./25 gal.	

- Do not exceed 17 oz./A per crop or year.
- For specific information about developmental stages of the target pest, associated damage and action thresholds to properly time applications, consult with your State Cooperative Extension Service.

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**Applications to Soil or Other Growing Media.** Ornamental plants, fruit and nut trees (non-bearing), Christmas trees, and forest seedlings grown in greenhouses, lath and shadehouses, containers, field nurseries and interiorscapes.

Pests	Rate	Use Restrictions
Aphids Fungus gnats Leaf Beetles Leafminers Mealybugs Root Aphid Root Weevil larvae (including <i>Diaprepes abbreviatus</i> ) Soft Scales Thrips – foliar feeding (suppression) Whiteflies	4-8.5 oz./100 gal. or 8-17 oz./A	Apply to the soil or growing media to help prevent pests in situations where tolerance of insects or damage is low. Allow a minimum of 1 week for smaller plants and at least 2 weeks for large plants (typically found in nurseries, Christmas tree plantations) to translocate Flagship 25WG to feeding sites of the target pest.  Re-apply as needed, but no sooner than every 7 days.  Apply as a broadcast, band or drench. Refer to the <b>Application Procedures</b> and <b>Banded Application</b> sections for additional direction.
<b>Larvae (Grubs) of:</b>  <i>Aphodius</i> spp. Asiatic garden beetle Billbugs Black turfgrass ataenius Dung beetle European chafer Green June beetle Japanese beetle May or June beetle Northern masked chafer Oriental beetle Southern masked chafer Scarab beetle	6-8.5 oz./100 gal. or 12.7-17 oz./A	Apply from adult flight through peak egg hatch of the targeted species. Apply as a broadcast, band or drench treatment over the active root zone. Refer to the <b>Application Procedures</b> and <b>Banded Application</b> sections for additional direction.  For drench and chemigation applications made to containerized plant material, apply sufficient volume to moisten the media around the root zone without loss from the bottom of the container.
Fire Ants	1-3 oz./10 gal.	<b>Individual Mound Treatment:</b> For small mounds (<6 inch in diameter) apply 1 gal. of water per mound and for larger mounds apply 2-3 gal. of dilute solution per mound for optimum control. Direct the application to the center of the mound, including a 6-inch diameter circle.

- For broadcast applications, typical water volume is 1.5 - 5 gals./1,000 sq. ft.
- For band applications, minimum water volume is 5 gals./1,000 linear feet.
- Do not exceed 17 oz./A per crop or year.
- Do not over-water or leach for a minimum of 7 days after watering in for maximum uptake of Flagship 25WG by the plant root system.
- For specific information about developmental stages of the target pest, associated damage, and action thresholds to properly time applications, consult with your State Cooperative Extension Service.



### Banded Application

For banded applications, apply uniformly over the row or active root zone in a minimum water volume of 5 gallons per 1,000 linear feet. For optimum activity, rainfall or irrigation is necessary within 24 hours of application.

### Flagship 25WG rate (ounces of product) per 1,000 linear feet of row for particular row spacing.

Rate/A	Lb ai./A	Row Spacing										
		3 ft.	4 ft.	4.5 ft.	5 ft.	6 ft.	7 ft.	8 ft.	9 ft.	10 ft.	11 ft.	12 ft.
8 oz./A	0.125	0.55	0.73	0.83	0.92	1.10	1.29	1.47	1.65	1.84	2.02	2.20
12.7 oz./A	0.186	0.88	1.16	1.32	1.46	1.76	2.05	2.33	2.65	2.93	3.23	3.51
17oz./A	0.265	1.17	1.55	1.76	1.95	2.34	2.74	3.11	3.53	3.91	4.30	4.68

### Drench Application

When applying Flagship 25WG as a drench, apply enough solution to sufficiently wet 1/2 - 3/4 of the root zone without allowing runoff out of the container. Use the following chart as a guideline for the number of pots that this volume will treat based on the size of the pot and drench volume. Use higher drench volumes for woody ornamentals, containers having multiple plants, and those crops with longer production times or needing longer protection.

Note: Drench volumes will vary based on the porosity of the growing media. Conduct your own tests to determine correct drench volumes for your growing media.

Pot Size	Suggested Drench Volume fl. oz./pot	Pots Treated per 100 gal.
4 inch standard	2-3	6,400 - 4,267
6 inch standard	3-4	4,267 - 3,200
8 inch standard	5-10	2,560 - 1,280
10 inch standard	12.5 - 25	1,024 - 512

**Applications to Grass and Turf Areas In and Around Ornamental Production Facilities**

Grass and turf around container grown plants and areas surrounding field nurseries and greenhouses.

Apply Flagship 25WG as a broadcast application to turfgrass for control of targeted pests. To help prevent pests, irrigate within seven (7) days of application to move Flagship 25WG into the root zone where grubs feed. To control pests, irrigate within one day (1) of application to move Flagship 25WG into the root zone where grubs feed. Maintain adequate soil moisture before and after application for optimum control and healthy turfgrass growth. Excessively wet or dry conditions may negatively impact the performance of Flagship 25WG against white grubs and mole crickets. Do not mow turf until the treated area has been irrigated or rainfall has occurred to allow for maximum and uniform uptake into turfgrass.

Pests	Rate	Use Restrictions
<b>Larvae (Grubs) of:</b> <i>Aphodius</i> spp. Asiatic garden beetle Billbugs Black turfgrass atenioides Dung beetle European chafer Green June beetle Japanese beetle May or June beetle Northern masked chafer Southern masked chafer Oriental beetle Scarab beetle	12.7-17 oz./A or 1.5-1.95 oz./5,000 sq. ft.	Apply up to 45 days before the historical peak of adult flight to 2 <sup>nd</sup> instar grub of the species targeted.  For optimum control, treat from peak flight to peak egg hatch.
Mole Crickets (suppression)*	12.7-17 oz./A or 1.5-1.95 oz./5,000 sq. ft.	To suppress damage, treat from first egg hatch to peak egg hatch.
Chinch bugs (suppression)*	12.7-17 oz./A or 1.5-1.95 oz./5,000 sq. ft.	Apply when young nymphs are first observed.
Fire Ants	1-3 oz./10 gal.	<b>Individual Mound Treatment:</b> For small mounds (<6 inch in diameter), apply 1 gal. of dilute solution per mound. For larger mounds, apply 2-3 gal. per mound for optimum control. Direct the application to the center of the mound, including a 6-inch diameter circle.

- Use sufficient water volume (1.5 - 5 gal./1000 sq. ft.) to uniformly distribute Meridian 25WG over the area being treated and to adequately move the active ingredient into the canopy and thatch layers.
- For turf with heavy thatch, (more than ¾ inches), use the higher rates within the rate range.
- \* Suppression can mean either erratic control, ranging from good to poor, or a consistent level of control below that generally acceptable for commercial purposes.
- Do not exceed 17 oz./A per year.
- For specific information about developmental stages of the target pest, associated damage and action thresholds to properly time applications, consult with your State Cooperative Extension Service.

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**Foliar Application to Vegetable Plants Grown for Re-sale to Consumers**

For tomatoes, peppers, eggplant, and cucurbit plants grown for re-sale to consumers.

Crop	Pest	Rate	Use Restrictions
<b>Fruiting Vegetables</b> Eggplant Ground-cherry Pepino Peppers (bell, chili, cooking, pimento, and sweet) Tomatillo Tomato	Aphids Colorado Potato Beetle Flea beetles Leafhoppers	2.0–3.0 oz./A or 0.23–0.34 oz./ 5,000 sq. ft.	Apply before pests reach damaging levels. Apply higher rates for heavy infestations.
	Whiteflies Pepper Weevil Stink Bugs	3.0–5.5 oz./A or 0.34–0.63 oz./ 5,000 sq. ft.	

- Do not exceed 11 oz./A (1.26 oz./5,000 sq. ft.) of Flagship 25WG per crop.
- Allow at least 5 days between applications.

<b>Cucurbit Vegetables</b> Chayote Chinese waxgourd Citron melon Cucumber Edible gourd Gherkin <i>Momordica</i> species Muskmelon Pumpkin Squash: summer and winter Watermelon	Aphids Flea Beetles	1.5–3.0 oz./A or 0.17–0.34 oz./ 5,000 sq. ft.	Apply before pests reach damaging levels. Apply higher rates for heavy infestations.
	Cucumber Beetles (suppression) Leafminers (suppression) Whiteflies	3.0–5.5 oz./A or 0.34–0.63 oz./ 5,000 sq. ft.	

- Do not exceed 11 oz./A (1.26 oz./5,000 sq. ft.) of Flagship 25WG per crop.
- Allow at least 5 days between applications.

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**STORAGE AND DISPOSAL**

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

**Pesticide Storage**

Store in a cool, dry place.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup, procedures and disposal of wastes.

**Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

**Container Handling**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned stay out of smoke.

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For non-emergency (e.g., current product information), call  
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for :  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

SCP 955A-L1(draft d) (8 oz. booklet)  
SCP 955A-L3 (draft d) (2 lb. booklet)

FLA 25WG 955A-L(draft-d)clean-ig-11-18-09 000100-00955.20091118.d.pdf

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(Nondetachable container Label)  
(8 oz.)

Flagship® 25WG

Insecticide

GROUP 4A INSECTICIDE

For foliar and systemic control of insect pests in ornamental plants and nut trees (non-bearing), Christmas trees, forest seedlings and listed vegetables grown for transplant.

Active Ingredient:	
Thiamethoxam (CAS No. 153719-23-4) .....	25.0%
Other Ingredients:	75.0%
Total:	100.0%

Flagship® 25WG is a water-dispersible granule that contains 4 oz. of active ingredient per lb. of formulated product.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See additional precautionary statements and directions for use in booklet.

**AGRICULTURAL USE REQUIREMENTS**

**Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.**

EPA Reg. 100-955

EPA Est. XXXXX

SCP 955A-L1(draft d)

8 ounces

Net Weight

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(non detachable Back label)  
(8 oz)

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

**CAUTION**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

<b>FIRST AID</b>	
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>NOTE TO PHYSICIAN</b>	
There is no specific antidote if Flagship 25WG is ingested. Induce emesis or lavage stomach. Treat symptomatically.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b>	
For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call <b>1-800-888-8372</b>	

**Refer to Environmental Hazards, Physical or Chemical Hazards, and complete Storage and Disposal and Chemigation sections in booklet.**

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U.S. Patent No.

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P.O. Box 18300  
Greensboro, North Carolina 27419-8300

SCP 955A-L2(draft d)

FLA955A-L(draft-d)clean-lg-11-18-09 000100-00955.20091118.d.pdf

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(Nondetachable container Label 2 lb)

Flagship® 25WG

Insecticide

GROUP 4A INSECTICIDE

For foliar and systemic control of insect pests in ornamental plants, fruit and nut trees (non-bearing), Christmas trees, forest seedlings and listed vegetables grown for transplant.

Active Ingredient:	
Thiamethoxam (CAS No. 153719-23-4) .....	25.0%
Other Ingredients:	75.0%
Total:	100.0%

Flagship® 25WG is a water-dispersible granule that contains 4 oz. of active ingredient per lb. of formulated product.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See additional precautionary statements and directions for use in booklet.

**AGRICULTURAL USE REQUIREMENTS**

**Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.**

EPA Reg. 100-955

EPA Est.xxxxx

SCP 955A-L3(draft d)

2 pounds  
Net Weight



**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

**CAUTION**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

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## STORAGE AND DISPOSAL

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