



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Teresa S. Cox
Regulatory Product Manager
Syngenta Crop Protection LLC
410 Swing Road, P.O. Box 18300
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APR 11 2014

Subject: Tilt 45 W
EPA Registration No. 100-780
Your Resubmission Amendment dated February 19, 2014
Decision No. 481845

Dear Ms. Cox:

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable. A stamped copy of your label is enclosed for your records.

You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipment after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions. If you have any questions, please contact Tamue L. Gibson by phone at (703) 305-9096 or via email at gibson.tamue@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Shaja B. Joyner".

Shaja B. Joyner
Product Manager, Team 20
Fungicide Branch
Registration Division (7504P)

Enclosure: Label stamped "Accepted"

2825

MASTER

Group 3 Fungicide

Tilt® 45W

Fungicide

Active Ingredient: Propiconazole: (CAS No. 60207-90-1)	45.0%
Other Ingredients:	55.0%
Total:	100.0%

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-780

EPA Est.

SCP XXX

_____ pounds
Net Weight

ACCEPTED
APR 11 2014
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 100-780

FIRST AID	
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.
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 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER	
For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material.
- Shoes plus socks

User Safety Requirements

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

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them

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.

Water-soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard for Agriculture Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water-soluble packets must:

- Wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders.
- Be provided, and must have immediately available for use in an emergency, such as a broken package, spill or equipment breakdown, chemical-resistant gloves, chemical-resistant footwear, and PF 5 dust-mist respirator

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

Environmental Hazards

This product is toxic to fish and shrimp. Do not apply directly to water or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate. Refer to product labeling for use restrictions to protect endangered species.

Physical or Chemical Hazards

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

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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 should 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, LLC or Seller. All such risks shall be assumed by Buyer and User, and 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. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions 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. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **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 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.

Tilt 45W should be used only in accordance with recommendations on this label or in separately published Syngenta supplemental labeling recommendations for 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.

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. 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.

Personal Protective Equipment (PPE)

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 soil, or water is:

- Coveralls,
- Shoes and socks, and
- Chemical-resistant gloves made of any waterproof material
-

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, OR ILLEGAL RESIDUES.

USE INFORMATION

Tilt 45W is a broad-spectrum fungicide for the control of many important plant diseases.

USE RESTRICTIONS

Important: Do not use in nurseries, on turf, landscape plantings, or as a tree injection.

Rotational Crops

Soybeans may be planted as a double crop following a cereal crop which has been treated with Tilt 45W. Do not use hay, forage or fodder from the soybean crop as any component of animal feed or bedding.

Do avoid possible illegal residues. Do not plant any other crop intended for food, grazing, or any component of animal feed or bedding within 105 days of Tilt 45W application to the preceding crop, unless the second crop appears on this label.

Do not harvest rice until 45 days after last application of propiconazole. The pre-harvest interval (PHI) for rice is 45 days.

Integrated Pest Management

Tilt 45W should be integrated into an overall disease and pest management strategy (IPM) whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area. Tilt 45W may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

RESISTANCE MANAGEMENT

Group **3** Fungicide

Tilt 45W is in the Group 3 class fungicides. The mode of action of Tilt 45W is as a demethylation inhibitor of sterol biosynthesis (DMI) which disrupts membrane synthesis by blocking demethylation. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or State agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Syngenta Crop Protection encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label.

Tilt should not be alternated or tank mixed with any fungicide to which resistance has already developed.

Spray Drift Management

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

Wind Speed

Do not apply at wind speeds greater than 15 mph.

Droplet Size

Apply as a medium or coarser spray (ASAE Standard 572).

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of propiconazole. Where states have more stringent regulations, they must be observed.

Equipment

All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Spray Equipment

Thorough coverage is necessary to provide good disease control.

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate sprayer before use.

Use a pump with capacity to: (1) maintain 35-40 psi at nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension - this requires recirculation of 10 percent of tank volume per minute. Use a jet agitator or liquid sparge tube for agitation. Do not air sparge.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on suction side of pump should be *16-mesh or coarser*. Do not place a screen in the

recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.

Application Instructions

Aerial Application: For those crops where aerial applications are indicated, apply in a minimum of 5 gals. of water per acre unless specified otherwise. Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply directly to humans or animals.

Additional requirements for aerial applications:

1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Ground Application: Apply Tilt 45W by ground equipment in a minimum of 15 gals. of water per acre.

Additional requirement for groundboom application:

1. Do not apply with a nozzle height greater than 4 feet above the crop canopy.

Application Through Irrigation Systems (Chemigation) – Apply Tilt through irrigation equipment only to crops for which chemigation is specified on this label.

Tilt 45W, alone or in combination with other pesticides, which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, or moving wheel, irrigation systems. 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.

Operating Instructions

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 shut down.
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.

Center Pivot Irrigation Equipment

Notes: (1) Use only with drive systems, which provide uniform water distribution. (2) Do not use end guns when chemigating Tilt 45W through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply $\frac{1}{8}$ - $\frac{1}{2}$ inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as

recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated capacity.

- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Tilt 45W required to treat the area covered by the irrigation system.
- Add the required amount of Tilt 45W and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the Tilt 45W solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Tilt 45W solution has cleared the sprinkler head.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30-minute interval. When applying Tilt 45W through irrigation equipment, use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Tilt 45W required to treat the area covered by the irrigation system.
- Add the required amount of Tilt 45W into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Tilt 45W solution has cleared the last sprinkler head.

Mixing Instructions

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary to

maintain uniformity of the spray mixture. 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.**

Tilt 45W Alone: Add $\frac{1}{3}$ of the required amount of plain water to the spray or mixing tank. With the agitator running, drop the required amount of Tilt 45W into the tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the Tilt 45W has dissolved, and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Tilt 45W + Tank Mixtures: Tilt 45W is usually compatible with all tank mix partners listed on this label. Add $\frac{1}{3}$ of the required amount of plain water to the spray or mixing tank. With the agitator running, drop the required amount of Tilt 45W into the tank all at once. Continue agitation while adding the remainder of the water. Allow the Tilt 45W to dissolve and the desired amount of other products recommended for tank mixture to become completely dispersed. Continue agitation to maintain a uniform suspension until all of the spray solution has been applied.

If using Tilt 45W in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should not be mixed 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 registered.

CELERY

Early blight (*Cercospora apii*) and **late blight** (*Septoria apicola*): Apply 0.25 lb./acre of Tilt 45W on a 7-day schedule either by ground or aerial application. If desired, Tilt 45W may be tank-mixed with an appropriate spreader-sticker.

Notes: To avoid possible illegal residues, (1) Do not apply more than 1.0 lb. of Tilt 45W per crop, and (2) Do not apply during the last 14 days before harvest.

CEREALS

Wheat, Barley, Rye, Triticale and Oats

Tilt 45W controls leaf diseases caused by **rusts** (*Puccinia* spp.), **powdery mildew** (*Erysiphe* spp.), **leaf blight** and **glume blotch** (*Septoria* spp.), **tan spot** (*Pyrenophora tritici-repentis*), **Helminthosporium leaf blight**, **spot blotch** (*Bipolaris sorokiniana*), **barley scald** (*Rhynchosporium secalis*), and **net blotch** (*Pyrenophora teres*). Highest yields are normally obtained when Tilt 45W is applied to the emerging flag leaf. Tilt 45W can be applied until the ligule of the flag leaf emerges. (Feekes growth stage 8). Do not apply after this growth stage to avoid possible illegal residues. Tilt 45W may be applied earlier if disease symptoms appear (especially applicable to barley).

Early season leaf disease suppression: Apply 0.125-0.25 lb/acre of Tilt 45W for suppression of tan spot, Septoria, and powdery mildew.

Leaf disease control: Apply 0.25 lb/acre of Tilt 45W at first appearance of disease. Protecting the flag leaf is important for maximizing the potential yield.

Foot rot (*Pseudocercospora* spp.): Apply 0.25 lb./acre of Tilt 45W plus half rates of other EPA-registered fungicides such as Topsin® M. Apply at tillering, but before elongation has occurred.

Notes: To avoid illegal residues: (1) Do not apply more than 0.25 lb/acre of Tilt 45W per season. (2) Do not apply to oats within 40 days of harvest. (3) Do not graze or feed livestock treated forage or cut the green crop for hay or silage. After harvest, the straw may be used for bedding or feed. (4) Tilt-treated oat forage may be grazed and oat forage and hay may be fed to livestock.

CITRUS (NONBEARING)

Greasy spot (*Mycosphaerella citri*) in nonbearing citrus: Apply 0.375 – 0.5 lb/acre during June – August.

Note: To avoid possible illegal residues, do not apply to citrus that will bear harvestable fruit within 12 months.

CORN (FIELD CORN, FIELD CORN GROWN FOR SEED, SWEET CORN, AND POPCORN)

For control of **Helminthosporium leaf blights** (*Helminthosporium maydis*, *H. turcicum*, and *H. carbonum*), **rusts** (*Puccinia* spp.), **gray leaf spot** (*Cercospora zea-maydis*), and **eye spot** (*Aureobasidium zeae*), apply Tilt 45W according to the following schedule:

Helminthosporium Leaf Blights: Apply 0.125-0.25 lb./acre of Tilt 45W when disease first appears and continue on a 7 to 14-day schedule.

Rusts: Apply 0.25 lb./acre of Tilt 45W when rust pustules first appear and continue on a 7 to 14-day schedule.

Gray Leaf Spot and Eye Spot: Apply 0.25 lb./acre of Tilt 45W when disease first appears. If conditions favorable for disease persist, continue to apply on a 14-day schedule.

Important: To avoid possible illegal residues: (1) Do not apply Tilt 45W to field and field corn grown for seed after silking. (2) Do not apply more than 1 lb./acre of Tilt 45W per season. (3) Do not apply to sweet corn within 14 days of harvest. (4) Do not harvest field corn, field corn grown for seed, or popcorn for forage within 30 days of application. (5) Do not harvest sweet corn for forage within 14 days of application.

GRASSES GROWN FOR SEED (NEBRASKA, OREGON, WASHINGTON, IDAHO, AND MINNESOTA ONLY)

Tilt 45W controls **rusts** (*Puccinia* spp.), **powdery mildew** (*Erysiphè* spp.), and **Selenophoma stem eyespot** (*Selenophoma*) in perennial ryegrass, fescues, bluegrass, orchardgrass, and/or wheatgrasses.

Mix 0.25-0.50 lb. of Tilt 45W (maximum 0.25 lb. on bluegrass) in a minimum of 20 gals. of water per acre for ground application, or in a minimum of 10 gals. of water per acre for aerial application. Apply when powdery mildew and Selenophoma infections or rust pustules are noticeable and increasing in number, in late spring or early summer.

Repeat at 14 to 21-day intervals. To maximize control under severe rust pressure, use the higher rate of 0.50 lb./acre (except on bluegrass), and make applications at 14-day intervals until the seed is mature. Do not apply more than 2 lbs./acre of Tilt 45W per growing cycle. Make the last application at least 20 days before seed matures. For bluegrass, it is important to begin application early in the growing season.

Important: To avoid possible illegal residues, do not: (1) feed hay cut within 20 days of the last application, or (2) graze treated areas within 140 days of the last application.

PEANUTS

Tilt 45W may be applied via ground, aerial and chemigation equipment.

Peanuts - Tilt 45W Alone For Foliar Disease Control

Late Leaf Spot (*Cercosporidium personatum*) - Apply 0.25 lb./acre of Tilt 45W beginning applications 35-40 days after planting or at the first appearance of disease. Continue applications on a 10 to 14-day schedule. Tilt 45W also may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

Early Leaf Spot (*Cercospora arachidola*) - Apply 0.16-0.25 lb./acre of Tilt 45W beginning applications 35-40 days after planting or at the first appearance of disease. Continue applications on a 14-day schedule. Under heavy disease pressure use higher recommended application rates. Tilt 45W also may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

Rust (*Puccinia arachidis*) - Apply 0.25 lb./acre of Tilt 45W beginning when pustules first appear. Continue on a 14-day schedule.

Important: To avoid possible illegal residues: (1) Do not apply more than 1 lb./acre Tilt 45W per season. (2) Do not apply within 14 days of harvest.

Peanuts - Tilt 45W Plus Chlorothalonil For Foliar Disease Control

Early and Late Leafspot - Combinations of Tilt 45W with products containing chlorothalonil may be used for early and late leaf spot control. Apply 0.125 lb. of Tilt 45W as a tank mixture with 0.75 lb. active ingredient chlorothalonil per acre. Use the following table as a guide to determine the appropriate amount of chlorothalonil to use in the tank mixture. Begin applications 35-40 days after planting or at the first appearance of disease and continue applications on a 10 to 14-day schedule. Tilt 45W plus chlorothalonil also may be used in State Agricultural Extension advisory (disease

forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

Important: Use the following table as a guide to determine the amount of product needed for the recommended tank mix ratios of Tilt 45W with various chlorothalonil formulations. To avoid possible illegal residues: (1) Do not apply more than 1 lb./acre of Tilt 45W per season. (2) Do not apply within 14 days of harvest. (3) Do not graze livestock in treated area. (4) Do not feed hay or threshings from treated fields to livestock.

Number of acres to be treated	Amount of Tilt 45W required for treated area (total acres to be treated)	Amount of chlorothalonil product required for treated area by formulation type (total acres to be treated)	
		6 lbs. a.i./gal.	
10	1.25 lbs.	10 pts.	
50	6.25 lbs.	50 pts.	
100	12.50 lbs.	100 pts.	

Peanuts - Tilt 45W Alone for Southern Stem Rot Control

For the control of Southern Stem Rot (*Sclerotium rolfsii*), apply Tilt 45W using one of the following schedules:

- A. Apply 0.25 lb./acre of Tilt 45W to the crown and pegging zones of the plant using chemigation or directed ground application. Begin applications 45 days after planting, or at the first appearance of disease, and repeat on a 14-day schedule.

Important: To avoid possible illegal residues: (1) Do not apply more than 1 lb. Tilt 45W per acre per season. (2) Do not feed green vines to livestock or graze livestock in treated area. (3) Do not apply within 14 days of harvest.

- B. Apply 0.50 lb./acre Tilt 45W to the crown and pegging zones of the plant using chemigation or directed ground application. Make 2 applications: the first at pegging (approximately 60 days after planting) or at the first appearance of disease, and the second application 3-4 weeks later.

Irrigation: When applying Tilt 45W in irrigation water for Southern Stem Rot Control of Peanuts, use a minimum of ¼-½ inches of irrigation water per acre. Use enough water so that the fungicide penetrates the peanut canopy and reaches the crown of the plant where *Sclerotium rolfsii* is most active.

Ground Application: When applying Tilt by ground equipment, use a minimum of 20-60 GPA directed to the crown of the plant where *Sclerotium rolfsii* is most active. For best disease control, the higher-carrier volume is recommended. Canopy openers also may be used to improve fungicide placement.

When applying Tilt 45W via irrigation or as a directed ground application, additional methods should be employed for leaf spot control.

Banded Application: For banded applications, the treated area is the area covered by the band, not total cropland planted. The following formula can be used to calculate the amount of Tilt needed per acre of crop when banded applications are made.

<u>band width in inches</u>					
row spacing in inches	X	broadcast rate	=	amount needed	
		per acre		per acre of field	

Important: To avoid possible illegal residues: (1) Do not apply more than 1 lb. Tilt 45W per acre per season. (2) Do not feed hay from treated fields to livestock. (4) Do not apply within 21 days of harvest.

PECANS

Ground application (enclosed cabs only): Apply in sufficient water to provide for full coverage.

Aerial: Apply in a minimum of 20 gallons of water.

Pecan scab (*Cladosporium caryigenum*), **downy spot** (*Mycosphaerella caryigena*), **liver spot** (*Gnomonia caryae pv pecanae*), **vein spot** (*Gnomonia nerviseda*), **zonate leaf spot** (*Cristulariella moricola*) and **powdery mildew** (*Microsphaera penicillata*): Apply 0.25 - 0.50 lb./acre on a 14 day schedule during bud break and pre-pollination sprays. Apply 0.375 – 0.50 lb/acre during nut formation and cover sprays. Use higher rates when disease pressure is heavier. Do not apply after shuck split.

Other foliar diseases: Tilt may be applied for control of mid to late season foliar diseases at 0.25 lb/ acre with other registered pecan products labeled for these diseases. Observe all directions, precautions, and limitations for the other products.

NOTES: Do not graze livestock in treated areas or cut treated cover crops for feed. Observe endangered species restrictions.

Endangered Species Restrictions: The use of any pesticide in a manner that may kill or otherwise harm an endangered or threatened species, or adversely modify their habitat, is a violation of federal laws. The use of this product in pecans is controlled to prevent death of harm to endangered species. Do not use Tilt in the following counties:

State	Counties		
Alabama	Colbert Greene Jackson Lamar	Lauderdale Limestone Madison Marshall	Morgan Pickens Sumter
Arkansas	Clark Clay Cross	Dallas Hot Springs Randolph	Sharp St. Francis
Kentucky	Ballard Butler Green	Hart Livingston McCracken	Taylor Warren
Mississippi	Lowndes	Monroe	Noxubee
Missouri	Gasconade Jefferson Miller	Osage Ripley St. Louis	Wayne
Tennessee	Bedford Decatur Hardin	Lincoln Marshall Maury	Perry Sequatchie

PINEAPPLE (HAWAII ONLY)

Butt rot disease of pineapple (*Ceratocystis paradoxa*), apply 0.25 lb. of Tilt 45W per 500 gals. of water. Treatments can be made in either a cold or hot water dip.

Cold Water Dip: Immerse crowns to give thorough wetting, remove and allow to drain.

Hot Water Dip: Maintain water temperature at 125°F (52°C). Soak crowns for 20-30 minutes, remove and allow to drain.

Important: To avoid possible illegal residues: (1) Do not use treated crowns for food or feed. (2) Do not graze while plant is growing. (3) Do not graze tops until fruit is harvested. (4) Dispose of used dip solution according to local, state, and federal regulations.

RICE (DO NOT USE IN CA)

In rice, Tilt 45W controls **sheath blight** (*Rhizoctonia solani*), **brown leaf spot** (*Helminthosporium oryzae*), **narrow brown leaf spot** and **brown blotch** (*Cercospora oryzae*), **leaf smut** (*Entyloma oryzae*), **sheath spot** (*Rhizoctonia oryzae*), and **black sheath rot** (*Gaeumannomyces graminis*). Tilt 45W also suppresses **stem rot** (*Sclerotium oryzae*). Apply Tilt 45W on either of the following schedules as an aerial spray in 5-10 gals. of water per acre:

- A. 0.375 lb./acre at first internode elongation (up to 2-inch panicle) and repeat at swollen boot. Make the second application 10-14 days after the first application, but before the boot splits and head emerges. Tilt 45W provides best control of sheath blight when the first application is applied at disease appearance in the field. The first application is recommended when 5 percent or fewer of the tillers are infected.
- B. 0.625 lb./acre at first internode elongation (up to 2-inch panicle). The 0.625 lb. rate is recommended if greater than 10 percent of the tillers are infected with sheath blight. If disease reappears, use another registered fungicide for the second application.

Important: To avoid possible illegal residues: (1) Do not apply to stubble or ratoon crop rice; (2) Do not use in rice fields where commercial farming of crayfish will be practiced; (3) Do not drain water from treated rice fields into ponds used for commercial catfish farming; and (4) Do not use water drained from treated fields to irrigate other crops.

Endangered Species Restrictions: The use of Tilt 45W (propiconazole) on rice is restricted to protect the endangered fat pocketbook pearly mussel (*Potamilus capax*) and its habitat. Use is prohibited in the following areas of AR:

Mississippi County - Within the basin that drains directly into the Right Hand Chute of Little River, south of Big Lake National Wildlife Refuge.

Poinsett County - Between Crowley's Ridge and the levee east of the Right Hand Chute of Little River and the St. Francis Floodway. Use is also prohibited west of Rt. 140 and north of Rt. 63 at the siphon near Marked Tree. Except that the prohibited area does not include the area bounded by Arkansas highway 373 on the west, highway 63 on the east, and highway 14 on the south.

Cross, St. Francis, and Lee Counties - Between Crowley's Ridge and the levee east of the Right Hand Chute of Little River, and the St. Francis Floodway as far south as the confluence of L'Anguille River (Lee County).

Wild Rice (MN only)

For control of **Helminthosporium leaf blight** and **brown spot** (*Bipolaris* spp.), apply 0.375 lb./acre of Tilt 45W per acre at both booting and heading, or make a single application of 0.50 lb./acre booting. For aerial applications, apply in a spray volume of 5-10 gals./acre.

Important: Do not use water drained from treated fields to irrigate other crops.

STONE FRUIT: APRICOTS, CHERRIES (SWEET AND TART), NECTARINES, PEACHES, PLUMS, PLUMCOT, PRUNES AND CULTIVARS AND/OR HYBRIDS OF THESE.

Stone fruit diseases are most effectively controlled by ground application, using sufficient water volume to provide thorough and uniform coverage.

Brown Rot Blossom Blight (*Monilinia* spp.): Apply 0.25 lb./acre of Tilt 45W at early bloom stage. If disease pressure is low, a second application of 0.25 lb./acre may be made as needed through petal fall. Under conditions of high disease pressure and/or very susceptible varieties, make a second application from 75-100% bloom and a third application at petal fall.

Fruit Brown Rot (*Monilinia* spp.): Apply as needed a maximum of 2 sprays of Tilt at 0.25 lb./acre during the preharvest period up to the day of harvest (0 day PHI).

Powdery Mildew (*Podosphaera* spp.) and Cherry Leafspot (*Blumeriella jaapii*): Follow the brown rot blossom blight schedule. Make up to 2 additional applications at 0.25 lb./acre on a 10-14 day interval from the end of petal fall to harvest.

Notes: (1) Do not apply more than 0.75 lb /acre of Tilt 45W per crop from early bloom through petal fall. (2) Do not apply more than 0.5 lb./acre /crop of Tilt 45W from early bloom through harvest. (3) Do not apply more than 1.25 lb./acre /season of Tilt 45W.

Precaution: Applications of Tilt during bloom to Stanley plums have occasionally caused fruit to be less oval in shape and smaller in size at harvest. To avoid this, do not apply Tilt to Stanley plums earlier than 21 days prior to harvest.

SUGARCANE (HAWAII ONLY)

Pineapple disease of sugarcane (*Ceratocystis paradoxa*): Apply Tilt 45W to cut seed pieces using 0.25 lb./500 gals. of water. Treatments can be applied in either a cold or hot water dip. Do not use treated seed pieces for food or feed purposes. Dispose of spent dip solution according to state and federal regulations.

Cold Water Dip - Immerse seed pieces to give thorough wetting, remove, and allow to drain.

Hot Water Dip - Maintain water temperature at 125°F (52°C). Soak the seed pieces for 20-30 minutes, remove, and allow to drain.

Conveyer Spray Treatment: Add 0.25 lb of Tilt 45W to 500 gallons of water (1:17000). Treat seed pieces with Tilt/water solution using in-line directed spray to sufficiently wet cut ends.

POST HARVEST APPLICATIONS

Citrus Fruit Crop Group 10-10

Australian desert lime (*Eremocitrus glauca*); Australian finger lime (*Microcitrus australasica*); Australian round lime (*Microcitrus australis*); Brown River finger lime (*Microcitrus papuana*); Calamondin (*Citrofortunella microcarpa*); Citron (*Citrus medica*); Citrus hybrids, *Citrus* spp., *Eremocitrus* spp., *Fortunella* spp., *Microcitrus* spp., and *Poncirus* spp.; Grapefruit (*Citrus paradisi*); Japanese summer grapefruit (*Citrus natsudaidai*); Kumquat (*Fortunella* spp.); Lemon (*Citrus limon*); Lime (*Citrus aurantiifolia*); Mediterranean mandarin (*Citrus deliciosa*); Mount White lime (*Microcitrus garrowayae*); New Guinea wild lime (*Microcitrus warburgiana*); Orange, sour (*Citrus aurantium*); Orange, sweet (*Citrus sinensis*); Pummelo (*Citrus maxima*); Russell River lime (*Microcitrus inodora*); Satsuma mandarin (*Citrus unshiu*); Sweet lime (*Citrus limetta*); Tachibana orange (*Citrus tachibana*); Tahiti lime (*Citrus latifolia*); Tangelo (*Citrus x tangelo*); Tangerine (Mandarin) (*Citrus reticulata*); Tangor (*Citrus nobilis*); Trifoliolate orange (*Poncirus trifoliata*); Uniq fruit (*Citrus aurantium* Tangelo group); cultivars, varieties and/or hybrids of these.

Use Tilt 45W as a post-harvest dip, drench, flood, or spray for the control of post-harvest diseases caused by:

- Green or Blue mold (*Penicillium* spp.)
- Sour rot (*Geotrichum citri-aurantii*)

Application Method	Disease	Rate (oz.)	Remarks
In-Line Dip/Drench	Green mold Blue mold Sour rot	8-16 oz./100 gal.	<ul style="list-style-type: none"> • Mix 8-16 oz. of Tilt 45W in 100 gal. of an appropriate water, wax/oil emulsion, or aqueous dilution of wax/oil emulsion. • Dip for a minimum of 30 seconds and allow fruit to drain.
In-line Aqueous or Fruit Coating Spray Application	Green mold Blue mold Sour rot	8-16 oz./250,000 lb. of fruit	<ul style="list-style-type: none"> • Ensure proper coverage of the fruit. • Mix the fungicide solution in an appropriate water, wax/oil emulsion, or aqueous dilution of a wax/oil emulsion for the crop being treated. • Use T-jet, CDA, or similar application system.

Do not make more than two applications to citrus fruit. For maximum decay control, treat fruit once before storage and once after storage, just prior to marketing.

- Ensure the Tilt 45W solution remains in suspension by using agitation.
- Tilt 45W is stable at temperatures of 60°C (or 140°F) that can be used to disinfest high-volume, recycling tanks.

Stone Fruit

Apricot (*Prunus armeniaca*); Nectarine (*Prunus persica*); Peach (*Prunus persica*); Plum (*Prunus domestica*, *Prunus* spp.); Plum, Chickasaw (*Prunus angustifolia*); Plum, Damson (*Prunus domestica* spp. *insititia*); Plum, Japanese (*Prunus salicina*); Plumcot (*Prunus armeniaca* × *P. domestica*); Prune (fresh), (*Prunus domestica*, *Prunus* spp.); Cherry, sweet (*Prunus avium*); Cherry, tart (*Prunus cerasus*); as well as other cultivars and hybrids of these.

Use Tilt 45W as a post-harvest dip, drench, or spray for the control of post-harvest diseases caused by:

- Brown rot (*Monilinia* spp.)
- Sour rot (*Geotrichum candidum*)
- Green and Blue mold (*Penicillium* spp.)

Application Method	Disease	Rate (oz.)	Remarks
In-Line Dip/Drench	Green mold Blue mold Brown rot Sour rot	2-4 oz./100 gal.	<ul style="list-style-type: none"> • Mix 2-4 oz. of Tilt 45W in 100 gal. of an appropriate water, wax/oil emulsion, or aqueous dilution of wax/oil emulsion. • Dip for a minimum of 30 seconds and allow fruit to drain.
In-line Aqueous or Fruit Coating Spray Application	Green mold Blue mold Brown rot Sour rot	2-4 oz./250,000 lb. of fruit	<ul style="list-style-type: none"> • Ensure proper coverage of the fruit. • Mix the fungicide solution in an appropriate water, wax/oil emulsion, or aqueous dilution of a wax/oil emulsion for the crop being treated. • Use T-jet, CDA, or similar application system.
Do not make more than one post-harvest application to the fruit.			
<ul style="list-style-type: none"> • Ensure the Tilt 45W solution remains in suspension by using agitation. • Tilt 45W is stable at temperatures of 60°C (or 140°F) that can be used to disinfest high-volume, recycling tanks. 			

Tomato

Use Tilt 45W as a post-harvest dip, drench, or high-volume spray for the control of certain post-harvest rots caused by:

- Black mold (*Alternaria alternata*)
- Sour rot (*Geotrichum candidum*)

Application Method	Disease	Rate (oz.)	Remarks
In-line Dip/Drench Application	Black mold Sour rot	4-8 oz./100 gal.	<ul style="list-style-type: none"> • Mix 4-8 oz. of Tilt 45W in 100 gal. of an appropriate water, wax/emulsion, or aqueous dilution of wax/oil emulsion. • Dip for approximately 30 seconds and allow fruit to drain. • Must be used in tank mixture with fludioxonil. May be used with a food grade adjuvant.
High-Volume (Dilute-Spray) Application	Black mold Sour rot	4-8 oz./50,000 lb. of fruit	<ul style="list-style-type: none"> • Ensure proper coverage of the fruit. • Mix the fungicide solution in an appropriate water, wax/oil emulsion, or aqueous dilution of a wax/oil emulsion for the crop being treated. • Use T-jet, CDA, or similar application system. • Must be used in tank mixture with fludioxonil. May be used with a food grade adjuvant.
Do not make more than one post-harvest application to the fruit.			
<ul style="list-style-type: none"> • Ensure the Tilt 45W solution remains in suspension by using agitation. • Tilt 45W is stable at temperatures of 60°C (or 140°F) that can be used to disinfest high-volume, recycling tanks. • Not for processed tomato. 			

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

Pesticide Disposal

Pesticide wastes may be 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 instructions, 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. 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 by other procedures approved by state and local authorities.

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 and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

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

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Tilt 45W
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