

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APR 26 1994

Gregory R. Watson, Ph.D.
 Ciba-Geigy Corporation
 P.O. Box 18300
 Greensboro, NC 27419-8300

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Dear Dr. Watson:

Subject: EPA Reg. No. 100-61.
 Tilt Fungicide
 EPA Reg. No. 100-737
 Tilt Gel Fungicide
 Amendments Dated March 22, 1993

Your letter of March 22, 1993 accompanied amendment forms for the two cited products and requested that a claim for control of black sheath rot be added to the labeling of each.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comment listed below. A stamped copy for each product, Tilt and Tilt Gel, is enclosed for your records. One copy of the finished labeling of both products must be submitted prior to releasing the products for shipment.

Note that this acceptance of your label does not relieve you of your obligation to comply with the Worker Protection Standard. If any of your products are covered by this standard, you are required to submit, and receive the Agency's approval by April 21, 1994, a revised label reflecting the required label statements of 40 CFR 156, published in the FEDERAL REGISTER on August 21, 1992 (57FR 38102). Further guidance will be issued. According to 40 CFR 156, subpart K: "No product to which this subpart applies shall be distributed or sold without amended labeling by any registrant after April 21, 1994". Please call 1-800-777-2185 if you have any labeling questions regarding the Worker Protection Standard.

BEST AVAILABLE COPY

CONCURRENCES

SYMBOL	7505C						
SURNAME	DGreenway						
DATE	4/26/94						

Our records indicate that Worker Protection Standard label revisions were submitted and accepted for both of the cited products. The finished labeling requested above should incorporate the approved Worker Protection Standard language.

Should you have questions or concerns, please contact me or call Denise Greenway on (703) 305-5542.

Sincerely yours,

Steve Robbins 
Acting Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosures

7505C: DGreenway: DLG: 4/26/94: 305-5542: B: BLKSHROT.TLT

BOOKLET FRONT COVER

ACCEPTED
with COMMENTS
In EPA Letter Dated

10/26/1984

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

100-737

Tilt® Gel

Fungicide

For control of certain diseases
in cereals and grasses grown for seed.

This outer protective container holds Tilt Gel in 4 individual
water-soluble packets which are designed to dissolve in water.
Do not handle the soluble packets excessively or expose them to
moisture, since this may cause them to rupture.

Active Ingredient:

Propiconazole: 1-[[2-(2,4-dichlorophenyl)-4-propyl-
1,3-dioxolan-2-yl]methyl]-1H-1,2,4-

triazole 41.8%

Inert Ingredients: 58.2%

Total: 100.0%

4 X 20 fl. oz. Water Soluble Packets
Total 5.38 Pounds Net Weight

KEEP OUT OF REACH OF CHILDREN.

WARNING

See additional precautionary statements
and directions for use inside booklet.

EPA Reg. No. 100-737
EPA Est. 5905-GA-1

CGA 130L2

CIBA-GEIGY

[GANNONC.LABELT]TILTG-2 - 3/12/93

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product. If terms are not acceptable, return the unopened product container at once.

Conditions of Sale and Warranty

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of CIBA-GEIGY or the Seller. All such risks shall be assumed by the Buyer.

CIBA-GEIGY warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall CIBA-GEIGY or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. CIBA-GEIGY and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.

DIRECTIONS FOR USE

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

General Information

Tilt Gel is a broad spectrum fungicide for the control of certain diseases in wheat, barley, rye, rice, and in grasses grown for seed.

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

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

Spray Equipment

Thorough coverage is necessary to provide good disease control.

To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap, as crop injury may occur.

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.

Although Tilt Gel is designed to dissolve in water, it is suggested that screens be used 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.

Aerial Application: For those crops where aerial applications are indicated, apply in a minimum of 5 gals. of water/A 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. Flagmen and loaders should wash thoroughly before eating, drinking, or smoking, and at the end of each day's operation.

Ground Application: Apply Tilt Gel by ground equipment in a minimum of 15 gals. of water/A.

Chemigation: Do not apply this product through any type of irrigation system.

Mixing Procedures

Wear rubber gloves, goggles or face mask, and a long-sleeved shirt when mixing and loading Tilt Gel. Thoroughly clean spray equipment before using this product to remove contaminants which may cause crop injury or sprayer clogging. Prepare no more spray mixture than is required for the immediate operation. Agitate thoroughly before and during application such that a rippling or rolling action is created at the liquid surface. Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already-treated area.

Precautions: 1) Soluble packets of Tilt Gel must be dissolved completely in water before any other tank mix partner, including micronutrients, other liquid or dry fertilizer, or any adjuvant such as a non-ionic surfactant, is added to the spray solution.
2) Do not use with oils.

Tilt Gel Alone: Add 1/2 to 2/3 of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of unopened soluble packets of Tilt Gel into the tank. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the packets have dissolved and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Tilt Gel + Tank Mixtures: Tilt Gel is usually compatible with tank mix partners listed on this label. Consult your dealer or CIBA-GEIGY sales representative for information concerning compatibility with other tank mix partners.

Add 1/2 to 2/3 of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of unopened soluble packets of Tilt Gel into the tank. Continue agitation while adding the remainder of the water. Tank mix partners may only be added when 1) the Tilt Gel packets and their contents have dissolved and dispersed in the tank, and 2) when the tank has filled with water. Continue agitation when adding the tank mix partners and while spraying the solution onto the crop.

If using Tilt Gel in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and

limitations which appear on the tank mix partner 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.

Rotational Crops

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

To 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 Gel application to the preceding crop, unless the second appears on this label.

Cereals

Wheat, Barley, Rye

In wheat, barley, and rye, Tilt Gel controls rusts (Puccinia spp.), powdery mildew (Erysiphe spp.), leaf blight and glume blotch (Septoria spp.), tan spot (Pyrenophora tritici-repentis), Helminthosporium leaf blight, barley scald (Rhynchosporium secalis) and net blotch (Pyrenophora teres). Apply 1 packet of Tilt Gel per 5 acres by ground or aerial application. Highest yields are normally obtained when Tilt Gel is applied to the emerging flag leaf. Tilt Gel 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 Gel may be applied earlier if disease symptoms appear (especially applicable to barley). Make only one application per season.

For control of foot rot (Pseudocercospora sp.), apply 1 packet of Tilt Gel per 5 acres plus half rates of other EPA-registered fungicides such as Benlate®, Mertect® and Topsin® M. Apply at tillering but before elongation has occurred.

Note: 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.

Rice

In rice, Tilt Gel 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 Gel also suppresses stem rot (Sclerotium oryzae). Apply Tilt Gel on either of the following schedules as an aerial spray in 5-10 gals. of water/A:

- A. 3 packets per 10 acres 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 Gel provides best control of sheath blight when the first application is made as soon as disease appears in the field. The first application is recommended when 5 percent or fewer of the tillers are infected.

OR

- B. 1 packet per 2 acres at first internode elongation (up to 2-inch panicle). This rate is recommended if greater than 10 percent of the tillers are infected with sheath blight. If disease reappears, use another EPA-registered fungicide for the second application.

Notes: 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; 4) Do not use water drained from treated fields to irrigate other crops; and 5) Do not use in California.

Endangered Species Restrictions: The use of Tilt Gel (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 Arkansas:

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'Anquille River (Lee County).

Grasses Grown for Seed (Nebraska, Oregon, Washington, Idaho, and Minnesota only)

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

Apply 1 packet of Tilt Gel per 2.5-5 acres (maximum 1 packet per 5 acres on bluegrass) in a minimum of 20 gals. of water/A for ground application, or in a minimum of 10 gals. of water/A 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 14-21 day intervals. To maximize control under severe rust pressure, use the higher rate of 1 packet per 2.5 acres (except on bluegrass), and make applications at 14-day intervals until the seed is mature. Do not apply more than 4 packets of Tilt Gel per 2.5 acres 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.

Notes: 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.

Storage and Disposal

Storage

Store in a cool, dry place. Do not store this product under wet conditions. Handle outer packaging carefully to avoid breakage of inner soluble packets.

Pesticide Disposal

Do not contaminate water, food or feed by storage or 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 Disposal

Do not reuse outer container. Dispose of empty outer container in a sanitary landfill, by incineration, or by burning, if allowed by state and local authorities. Stay out of smoke from burning containers.

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.

Precautionary Statements

Hazards to Humans and Domestic Animals

WARNING

Causes substantial but temporary eye injury. Do not get in eyes - wear goggles or face shield. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Statement of Practical Treatment

If in eyes: Hold eyelids open and flush eyes with a steady, gentle stream of water. Get medical attention.

If swallowed: Do not induce vomiting. Promptly drink a large quantity of milk, egg whites, or gelatin solution. If these are not available, drink large quantities of water. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center.

If inhaled: Move victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth, and get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

Note to Physician: If ingested, lavage stomach to avoid aspiration. Give a saline laxative and supportive therapy.

Environmental Hazards

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

Physical and Chemical Hazards

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

Accu-Pak™ and Tilt® trademarks of CIBA-GEIGY Corporation
U.S. Patent No. 4,079,062

Benlate® trademark of E. I. duPont de Nemours and Company, Inc.

Mertect® trademark of Merck and Company, Inc.

Topsin® trademark of Pennwalt Corporation

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

CGA 130L2

Product ID: 59110

Draft - Addition of
Black Sheath Rot

Back Page of Booklet

Tilt® Gel

Fungicide

For control of certain diseases in cereals
and grasses grown for seed.

Active Ingredient:

Propiconazole: 1-[[2-(2,4-dichlorophenyl)-4-propyl- 1,3-dioxolan-2-yl]methyl]-1H-1,2,4- triazole	41.8%
<u>Inert Ingredients:</u>	<u>58.2%</u>
Total:	100.0%

See directions for use in attached booklet.

EPA Reg. No. 100-737
EPA Est. 5905-GA-1

Tilt® trademark of CIBA-GEIGY Corporation
U.S. Patent No. 4,079,062

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4 X 20 fl. oz. Water Soluble Packets
Total 5.38 Pounds Net Weight

KEEP OUT OF REACH OF CHILDREN.

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Chemigation

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

CGA 130L2

Product ID: 59110

CIBA-GEIGY

[GANNONC.LABELT]TILTG-2 - 3/12/93