

PALC

*Scent off.*

## TWIST-ONS

### PRECAUTIONARY STATEMENTS Hazards to humans and domestic animals.

#### CAUTION

Avoid contact with skin. Avoid contamination of food and foodstuffs or drinking water. Following contact, wash with soap and water. Do not use near fire or flame.

#### ENVIRONMENTAL HAZARDS

Keep out of lakes, streams and ponds.

#### DIRECTIONS FOR USE

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

#### USE RESTRICTIONS

For application on trees, shrubs, and flowers; and at the edge of gardens and inanimate objects. For use against dogs and cats to reduce the frequency of their defecation, urination or walking in specific areas. Do not apply within gardens or directly on flowers and other plants. For outdoor use only.

#### PRE-APPLICATION DIRECTIONS

At the proposed site of application, remove any pet droppings. Wash away any remaining strong odor of urine or droppings with a garden hose.

#### APPLICATION DIRECTIONS

Attach SCENT-OFF "TWIST-ONS" to lower branches of EVERGREENS, SHRUBS, PLANTS etc. about 12" to 15" above ground, 2 to 3 feet apart. "TWIST-ONS" may be rubbed on lids of garbage cans, outdoor furniture etc. then attached to same. For use on small plants "TWIST-ONS" may be separated.

Use Scent-Off "TWIST-ONS" in conjunction with training and voice commands.

#### STORAGE & DISPOSAL

**Storage:** Store only in original container, in a dry place inaccessible to children and pets. Do not store package at temperatures above 140° F.

**Disposal:** Do not reuse original container. Securely wrap in newspaper and discard in trash.

PLANTABBS CORP.—Timonium, MD 21093

Printed and Produced in U.S.A.

EPA Est. No. 888C-MD-01  
EPA Reg. No. 822-7  
Reg. No. 10,377 RGR Ad. 1

**BEST AVAILABLE COPY**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FM 21  
62719-126  
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DEC 3 1990 -

Mr. Craig S. Barrow  
DowElanco  
Quad IV  
9002 Purdue Rd.  
Indianapolis, IN 46268-1189

8385292 300  
8385295 300  
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Dear Mr. Barrow:

Subject: Notification of Amended Labeling  
Rubigan A.S., EPA Registration No. 62719-142  
Rubigan 50W, EPA Registration No. 62719-126  
Your Submission Dated October 22, 1990

The amendments referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable with the following comments:

- Under the Environmental Hazards Section, change "Do not contaminate water by cleaning of equipment and disposal of wastes" to "Do not contaminate water when disposing of equipment washwaters".

Stamped copies of the labels are enclosed for your records.

Sincerely yours,

SL

Susan T. Lewis  
Product Manager (21)  
Fungicide-Herbicide Branch  
Registration Division (H7505C)

Enclosure

H7505C:J.Fairfax:jf:12/3/90

COPIES

MSOL							

### Directions for Use

See literature attached to this container for Complete Directions for Use.  
Read all directions carefully before applying Rubigan 50W.  
It is a violation of Federal Law to use this product in a manner inconsistent with the label.

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

##### CAUTION

Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Use eye protection and protective clothing such as coveralls, a long sleeved shirt and impermeable gloves (i.e. butyl rubber) when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### Statements of Practical Treatment

**If swallowed:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by forcing back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Immediately wash with plenty of soap and water. Get medical attention if irritation develops.

**If in eyes:** Immediately flush eyes with plenty of water. Get medical attention if irritation develops.  
**If inhaled:** If discomfort or cough, move individual to fresh air. Get medical attention if breathing difficulty occurs.

#### Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to water or wetlands. Do not apply when weather conditions favor runoff or drift from the target area. Do not contaminate water by cleaning of equipment or disposal of waste.

### STORAGE AND DISPOSAL

**Storage:** Store in original container only. In case of leak or spill, contain material and dispose as waste.

**Pesticide Disposal:** Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or for conditioning or, if permitted, dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LOT  
FN 0742

~~Elanco Products Company - A Division of Eli Lilly and Company  
Indianapolis, IN 46205, U.S.A.~~

DowElanco  
4040 Vincennes Circle, Suite 601  
Indianapolis, IN 46268

DATE NOV 2 1994  
NOTIFICATION  
LABEL NOT REVIEWED  
PER FR NOTICE 84-9

**ELANCO** ID 5958

Turf  
Fungicide

# Rubigan

50W

Net Weight 1 Pound

Rubigan 50W is a locally systemic fungicide for the control of specified diseases on turfgrasses, and the reduction of Poa annua populations in intensively maintained stands of perennial turfgrasses.

For use on: Golf Courses, Parks, Athletic Fields, Commercial and Residential Turf Areas.

#### Active Ingredient

fenarimol\* n-(2-chlorophenyl)-n-(4-chlorophenyl)

5-pyrimidinemethanol . . . . . 50%

Inert Ingredients . . . . . 50%

Contains 1/2 pound active ingredient per pound

\*Rubigan® (fenarimol, Elanco) (fenarimol, Elanco)

Keep Out of Reach of Children

### CAUTION

See side panel for additional precautionary statements

(B) (G) (J)

EPA Est. 37429 GA 01, 1471 IN 5, 477 MD 1  
Superscript used is first letter of lot number

EPA Reg. No. 14

EPA Reg. No.

# Rubigan® 50W

## Turf Fungicide

### Directions for Use—Read All Directions Carefully Before Applying

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

Rubigan 50W is a locally systemic fungicide that provides both protective and curative (eradicator) action. Rubigan 50W is recommended for use as a foliar spray for the control of selected turf diseases.

For use on Golf Courses, Parks, Athletic Fields, Commercial and Residential Turf Areas.

**Reduction of *Poa annua* Populations:** Applications of Rubigan to turfgrass areas containing *Poa annua* (annual bluegrass) have demonstrated a growth modifying effect on this species. Under certain environmental conditions and cultural practices, Rubigan applications may gradually reduce *Poa annua* populations in treated areas. Users that intend to reduce *Poa annua* populations must obtain either (1) Rubigan Product Information Bulletin—*Poa annua* Management Program for Overseeded Bermudagrass or (2) Rubigan Product Information Bulletin—*Poa annua* Management for Northern Cool Season Turf. Obtain Rubigan Product Information Bulletins from Elanco Products Company or their Rubigan distributors prior to use.

**Precautions:** Applications of Rubigan to turfgrass areas containing *Poa annua* (annual bluegrass) may result in the gradual reduction of this species from the turfgrass area. Cumulative dosages of 5 pounds of Rubigan per acre or 2 ounces per 1000 sq. ft. are usually necessary for this response to occur. If such a reduction or loss of *Poa annua* is not acceptable to the user, Rubigan can be used at the minimum label rate (0.2 oz 50W per 1000 sq. ft.) or in alternating application with contact type fungicides.

delete

### Application Directions

Rubigan should be added to the spray tank during the last half of the filling operation. Agitate thoroughly during the filling and spraying operation to insure a uniform spray mixture. Use only a properly calibrated fungicide sprayer with nozzle screens and inline strainers no finer than 50 mesh. Calibrate spray equipment to deliver sufficient water volume for uniform coverage.

Rubigan 50W Rate Recommendations - Greens

Disease Organism	Recommended Rates (oz. Rubigan 50W) per 1000 sq. ft.	Spray Interval (Days)	Disease Pressure	Comments (See below)
Dollar Spot <i>Lanzia</i> spp. and <i>Moerhousii</i> spp.	0.2	10-21	Low to Moderate	12
	0.4	14-28	Moderate to Heavy	13
Necrotic Ring Spot <i>Leptosphaeria</i> spp.	0.5	30	AB	9-11
Summer Patch <i>Friedrichi</i> spp.	0.5	30	AB	9-11
Fusarium Blight <i>Fusarium</i> spp.	0.5	30	AB	9-11

When treating golf greens always treat aprons and approaches

Rubigan 50W Rate Recommendations - Other Turf Areas				
Disease Organism	Recommended Rates (oz. Rubigan 50W) per 1000 sq. ft.	Spray Interval (Days)	Disease Pressure	Comments (See below)
Dollar Spot ( <i>Lanzia</i> spp. and <i>Moerhousia</i> spp.)	0.2 (2:10)	30	Low to Moderate	12
Anthraxnose ( <i>Sclerotinia</i> <i>graminis</i> )	0.5 - 1.0	30	AH	1
Dollar Spot ( <i>Gaeocercospora</i> <i>sorghii</i> )	0.2 (2:10)	10 - 21	Low to Moderate	12
	0.4 (4:10)	14 - 28	Moderate to heavy	13
Rhizoctonia Blight: Large Brown Patch ( <i>Rhizoctonia solani</i> )	0.4 (4:10)	7 - 14	Low to Moderate	12
	0.4 (4:10) See comments for tank mixtures	7 - 14	Moderate to heavy	Use Tank Mixes as Discussed Below
Necrotic Ring Spot ( <i>Leptosphaeria</i> spp.)	1.0 - 2.0	1 or 2 Applications	AH	5 - 9
Summer Patch ( <i>Phialophora</i> spp.)	1.0 - 2.0	1 or 2 Applications	AH	5 - 9
Fusarium Blight ( <i>Fusarium</i> spp.)	1.0 - 2.0	1 or 2 Applications	AH	5 - 9
Stripe Smut ( <i>Ustilago striiformis</i> )	4.0	Single Application	AH	2 - 9 - 10
Fusarium Patch, Pink Snow Mold ( <i>Microdochium nivale</i> )	2.0	1 or 2 Applications	AH	2 - 3 - 8
Typhula Blight: Gray Snow Mold ( <i>Typhula</i> spp.)	2.0	1 or 2 Applications	AH	2 - 8
Corticium Red Thread ( <i>Corticium</i> <i>calosporium</i> )	2.0	30	AH	2 - 7
Take All Patch ( <i>Gaeumannomyces</i> <i>graminis</i> )	1.0 - 2.0	1 or 2 Applications	AH	6 - 9
Spring Dead Spot ( <i>Leptosphaeria horae</i> )	1.0 - 1.5	Single Application	AH	2 - 4 - 9
Powdery Mildew ( <i>Erysiphe graminis</i> )	0.5 - 1.0	30	AH	13

1 Applications for anthracnose should be applied prior to the anticipated appearance of disease symptoms and continued at 30-day intervals for as long as conditions for disease continue

2 Single high rate applications such as required to control these diseases may result in the rapid elimination of *Poa annua* when applied to putting greens or other close cut turfgrass areas during periods of environmental stress. Subsequent reseeding with creeping bentgrass may be inhibited for up to 30 days following such applications.

3 This recommendation does not apply to the control of Fusarium patch (pink patch) as it occurs under conditions of cool, wet weather in the western United States, (CA, OR, and WA). Under these conditions Rubigan should be applied at 0.5 (5/10) oz./1000 sq. ft. every 3 to 4 weeks during periods of favorable disease conditions.

4 For Spring Dead Spot, make a single application of 1.0 oz./1000 sq. ft. in September, or 1.5 oz./1000 sq. ft. in October or November.

5 Rubigan may be applied preventively in a single 1.0 - 2.0 oz./1000 sq. ft. application in April or as a split application with 0.5 (5/10) - 1.0 oz./1000 sq. ft. applied in April and 0.5 (5/10) - 1.0 oz./1000 sq. ft. applied in May. Use the higher rate listed when area to be treated has a history of heavy disease infestation.

6 For take-all patch Rubigan may be applied preventively in a single 1.0 - 2.0 oz./1000 sq. ft. application or as a split application with 0.5 (5/10) - 1.0 oz./1000 sq. ft. applied in two applications at 30-day intervals. Applications should be made prior to permanent snow cover or frozen soil. Use the higher rate listed when area to be treated has a history of heavy disease infestation.

7 Applications for Corticium red thread should begin 1 to 2 weeks prior to the anticipated appearance of disease symptoms. Applications should be made at 30-day intervals with a maximum of 2 applications during any 1 season.

8 The initial application for Fusarium patch and Typhula blight should be made as a standard foliar application prior to permanent snow cover or frozen soil. A second application may be necessary in late winter or early spring if conditions are favorable for renewed disease development.

9 Applications for necrotic ring spot, summer patch, Fusarium blight, stripe smut, take-all patch, and spring dead spot should be applied to the turfgrass a. J thoroughly irrigated with 1/2 to 1 inch of water.

2 Single high rate applications such as required to control these diseases may inhibit germination of creeping bentgrass for up to 30 days following application.

- 10 Application for stripe smut can be made as a single application in October or in early spring prior to turfgrass greenup
- 11 For bentgrass putting greens Rubigan can be applied preventively at 0.5 (5/10) oz /1000 sq ft application beginning in April with a second 0.5 (5/10) oz /1000 sq ft in May. If conditions are favorable in the fall for disease occurrence applications 14 days prior to the anticipated appearance of disease symptoms may be necessary
- 12 All applications for dollar spot, copper spot and Rhizoctonia blight should be made as standard foliar applications. Applications made prior to the appearance of visible disease symptoms (preventative applications) should be made at the lowest rate and longest interval listed above
- 13 Applications to areas with visible symptoms of dollar spot, copper spot and powdery mildew should be made at the highest rate for that disease and continued at the shortest spray interval for that rate until the disease is brought under control. At this time the lower rate longer spray interval recommendations can begin

**Tank Mixtures:** When disease pressure from Rhizoctonia blight increases to moderate control will be enhanced by tank-mixing Rubigan with a contact fungicide such as Daconil® 2787. If a tank-mixture is used, apply the minimum label rate recommended for the control of Rhizoctonia blight. Under conditions of heavy Rhizoctonia blight pressure, additional sequential applications of a contact fungicide may be necessary to keep the disease adequately controlled.

**Additional Disease Control:** If turf is threatened by additional diseases Rubigan is compatible with most commonly used turf fungicides. Leaf spotting organisms such as *Drechslera* and *Curvularia* will require the use of a fungicide such as Daconil® 2787 or Tersan® LSR for control. If a tank mixture is used, follow label directions for the use of that product and apply at the minimum rate recommended for control of the target disease organism.

Rate Conversion Chart Rubigan 50W for Turf	
Label Rates—Rubigan 50W per 1000 sq ft	Quantity of Rubigan 50W per Acre
0.2 oz (1/5)	0.5 lb or 8 oz
0.4 oz (1/2)	1.0 lb or 16 oz
1.0 oz	2.5 lb or 40 oz
2.0 oz	5.0 lb or 80 oz
4.0 oz	10.0 lb or 160 oz

#### Precautionary Statements

Keep Out of Reach of Children

#### Hazards to Humans and Domestic Animals

##### CAUTION

Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist. Use eye protection and protective clothing such as coveralls, a long-sleeved shirt and impermeable gloves (i.e., butyl rubber) when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### Statements of Practical Treatment

**If swallowed:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Immediately wash with plenty of soap and water. Get medical attention if irritation develops.

**If in eyes:** Immediately flush eyes with plenty of water. Get medical attention if irritation develops.

**If inhaled:** If discomfort occurs, move individual to fresh air. Get medical attention if breathing difficulty occurs.

#### Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to water or wetlands. Do not apply when weather conditions favor runoff or drift from the target area. Do not contaminate water by cleaning of equipment or disposal of waste.

### STORAGE AND DISPOSAL

**Storage:** Store in original container only. In case of leak or spill, contain material and dispose as waste.

**Pesticide Disposal:** Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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

**Special Precaution:** Do not apply this product through any type of irrigation system.

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EPA Reg. No. E-100000-0000-0000~~

### Disclaimer of Warranties

Elanco Products Company makes no warranties concerning this product or its use, which extend beyond the description on the label. Elanco also expressly disclaims all warranties, express or implied, in relation to any use of this product in combination or sequential use with any other product not specifically recommended in writing by Elanco Products Company. All other warranties, expressed or implied, including but not limited to, any implied warranties of merchantability and fitness for a particular purpose, are disclaimed. All statements concerning this product apply only when used as directed. This disclaimer of warranties does not apply where prohibited by operation of law.

### Limitation of Damages

The liability of Elanco Products Company, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the return of the amount of the purchase price of this product and under no circumstances shall Elanco be liable for special, indirect, or consequential damages. If Rubigan is used in a combination or sequential use recommended by Elanco Products Company, the liability of Elanco shall in no manner extend to any damage, loss, or injury not directly caused by the inclusion of Rubigan in such combination or sequential use. This limitation of damages does not apply where prohibited by operation of law.

Rubigan <sup>®</sup> (Fenarimol, DowElanco)  
Daconil <sup>®</sup> (chlorothalonil, Ferenatia)  
Tersan <sup>®</sup> LSR (maneb, DuPont)

\* Warranty and disclaimer statements to be revised as per company policy when label is reprinted.

~~Literature valid February 1988  
Elanco Products Company - A Division of Eli Lilly and Company  
Indianapolis, IN 46205, U.S.A.  
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ID 5958

DowElanco  
4040 Vincennes Circle, Suite 601  
Indianapolis, IN 46268

## SUPPLEMENTAL LABELING

RECEIVED  
COMMENT  
System

DowElanco . Indianapolis, IN 46268, U.S.A.

RUBIGAN\* A.S. (E.P.A. REG. NO. 62719-142)  
RUBIGAN 50W (E.P.A. REG. NO. 62719-126)

Registered  
Trade  
Name  
No.

62719-126

### **POA ANNUA MANAGEMENT PROGRAM FOR OVERSEEDED BERMUDAGRASS GREENS AND TEES**

Poa annua behaves as a true winter annual weed in southern warm season turfgrass areas. As such, it reduces turf quality in overseeded Bermudagrass greens and tees and is a significant management problem for golf course superintendents. Rubigan can be used as a tool for reducing Poa annua populations in overseeded Bermudagrass greens and tees. Methods of reducing Poa annua populations can be varied to fit easily into a golf course turf management program. This supplemental labeling describes various options for managing Poa annua populations using Rubigan. The program should not be undertaken unless this bulletin is fully understood by the user. In addition, the user should read and follow all use directions, precautions and limitations on the Rubigan label.

#### **Rubigan Growth Regulating Effect**

Rubigan may exert a growth regulating effect in certain plants by reducing the biosynthesis of gibberellic acid. This effect is expressed as a reduction in internode elongation and suppression of overall plant growth. In the presence of sufficiently high rates of Rubigan or prolonged exposure, a species sensitive to this effect may be selectively suppressed. In turf this effect allows the competitive balance to shift in favor of less sensitive cultivars. Poa annua has demonstrated a significantly greater sensitivity to Rubigan than perennial turfgrass species and most of their cultivars. The selective growth regulation of Poa annua can be most readily observed in Rubigan treated greens and tees. Proper use of this activity can assist the golf course superintendent in managing the Poa annua composition of this greens and tees.

#### **Management of Poa annua Using Rubigan**

Rubigan, a highly effective locally systemic fungicide, is labeled for control of a number of economically important turfgrass diseases. The Rubigan Poa annua management program can be timed to coincide with fall fungicide applications for control of late season diseases in Bermudagrass greens and tees.

For optimum control, Rubigan should be applied prior to germination of Poa annua. Treatment alternatives include a program of either 2 or 3 applications to reach a 3.0 ounce/1000 square feet rate of Rubigan 50W or the 12.0 fluid ounce/1000 square feet rate of Rubigan A.S.

Timing is the critical issue in achieving control of Poa annua. Most consistent results are achieved when Rubigan is applied prior to germination of Poa annua. If a later overseeding date is scheduled, the three application strategy is most effective.

#### **Overseeding**

Fine bladed perennial ryegrass or blends of ryegrass cultivars are recommended for overseeding greens and tees. To avoid seeding stress the last application of Rubigan should be made at least 2 weeks before overseeding perennial ryegrass and the seeding rate should be a minimum of 30 pounds per 1000 square feet. If either Poa trivialis or bentgrass is used for overseeding follow the 3 application program. To avoid seeding stress when overseeding Poa trivialis or bentgrass, the final application of Rubigan should be made at least 30 days before overseeding.



**Rubigan *Poa annua* Control Programs**

Program	Number of Applications	Rate of Application	Spray Interval	Application Timing	Expected % Control
A	2	--A.S.-- 6.0 fl. oz./1000 square feet	14 days	1st application prior to <u><i>Poa annua</i></u> germination	75-95%
		--50W-- 1.5 oz./1000 square feet	14 days	1st application prior to <u><i>Poa annua</i></u> germination	75-95%
B	3	--A.S.-- 4.0 fl. oz./1000 square feet	14 days	1st application prior to <u><i>Poa annua</i></u> germination	75-95%
		--50W-- 1.0 oz./1000 square feet	14 days	1st application prior to <u><i>Poa annua</i></u> germination	75-95%

Note: A single application of 0.5 ounces of Rubigan 50W or 2.0 fluid ounces of Rubigan A.S. per 1000 square feet in January or February following overseeding will help enhance the suppression of *Poa annua* and prolong this effect through the spring season.

**Anticipated Results**

Application of Rubigan for management of *Poa annua* will coincide with the onset of winter dormancy in Bermudagrass. Extended periods of low temperatures and heavy rainfall after a Rubigan application may result in yellowing of Bermudagrass. This effect is attributable to developing dormancy of Bermudagrass, not to Rubigan application. Normal germination and growth of the overseeded grasses can be expected.

Applications of Rubigan in the programs recommended in this label will result in *Poa annua* control in the range of 75 to 95 percent. Results are most apparent during the following spring season when *Poa annua* seedheads are visible and plant populations can be measured. Concurrent control of turf diseases susceptible to Rubigan at the rates applied can be expected as a part of the *Poa annua* control program.

**Precaution**

- A single application of Rubigan A.S. or Rubigan E.C. in excess of 6.0 fluid ounces per 1000 square feet or Rubigan 50W in excess of 0.125 pounds per 1000 square feet may inhibit the germination of creeping bentgrass for up to 30 days after application. Do not apply this treatment where creeping bentgrass is to be seeded within 30 days after application.
- During periods of environmental stress, a single high rate application of Rubigan may rapidly eliminate *Poa annua* from greens, tees or other close cut turf areas. Do not apply this treatment if rapid elimination of *Poa annua* is a potential problem.
- Refer the Rubigan label for additional use directions, precautions and limitations before use.

\*Trademark of DowElanco

DowElanco  
Indianapolis, IN 46268-3030, U.S.A

09/05/90

Revisions: 1) DowElanco registration numbers added; 2) Label text edited for clarity; Single application program deleted.

Replaces ES 9277, 1/90