

50534-211

2-28-2003 1/24



United States  
Environmental Protection Agency  
Washington, DC 20460

<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input checked="" type="checkbox"/>	Other

OPP Identifier Number  
**NOTIFICATION**

**Application for Pesticide - Section I**

1. Company/Product Number 50534-211	2. EPA Product Manager Rick Keigwin / Rose Kearm	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Daconil Zn ®	PM# Team 21	
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419  <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____  Product Name _____	

**Section - II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____	<b>NOTIFICATION</b>  <b>FEB 28 2003</b>
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

Syngenta Crop Protection, Inc. respectfully submits the notification for Daconil Zn ® 50534-211. The following changes were incorporated on the label: the word "chemigation" was added to the heading subtitled "Application and Calibration Techniques for Sprinkler Irrigation" and the PPE and User Recommendations sections were added to the front panel of the label.

**Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes 4 x 1 gallon <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
*Certification must		If "Yes" Unit Packaging wgt.	No. per Container	If "Yes" Unit Packaging wgt.	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled					

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Ruhi Rezaaiyan		Title Regulatory Product Manager		Telephone No. (Include Area Code) 336-632-7381	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature 		3. Title Regulatory Product Manager			
4. Typed Name Ruhi Rezaaiyan		5. Date February 14, 2003			

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

Highlighted Copy  
2/24

**Daconil Zn®**



**Flowable Fungicide**

**Turf Care®**

**Turf and Ornamental Fungicide**

**Active Ingredient:**

**Chlorothalonil (tetrachloroisophthalonitrile) ..... 38.5%**

**Other Ingredients: ..... 61.5%**

**Total: ..... 100.0%**

*Contains 4.17 pounds chlorothalonil active ingredient per gallon (500 grams per liter)*

**EPA Reg. No. 50534-211**

**EPA Est. No. 50534-TX-001**

**KEEP OUT OF REACH OF CHILDREN.**

**WARNING/AVISO**

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

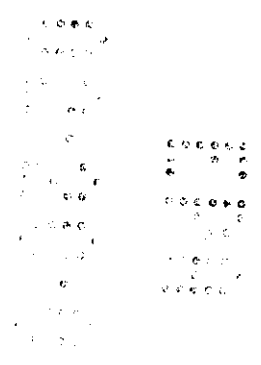
*See additional precautionary statements and directions for use inside booklet.*

**SCP 50534-211A**

**2.5 gallons  
U.S. Standard Measure**

**NOTIFICATION**

**FEB 28 2003**



3/24

**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 GB Biosciences Corporation or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold GB Biosciences and Seller harmless for any claims relating to such factors.

GB Biosciences 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 this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or GB Biosciences, and Buyer and User assume the risk of any such use. **GB BIOSCIENCES 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 GB Biosciences 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 GB BIOSCIENCES 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 GB BIOSCIENCES OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

GB Biosciences 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 GB Biosciences.

4/24

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**WARNING-AVISO**

Causes substantial but temporary eye injury. Harmful if swallowed, or absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin. DO NOT get in eyes or on clothing. DO NOT take internally.

**Note to User:** This product may produce mild bronchial irritation and temporary irritation of the skin characterized by redness or rash on exposed skin areas. Affected persons should consult a physician.

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>Immediately flush eyes with plenty of water and continue for 15 minutes. Seek medical attention for eyes immediately.</li> </ul>
<b>If on skin</b>	<ul style="list-style-type: none"> <li>Wash with plenty of soap and water. Get medical attention.</li> </ul>
<b>NOTE TO PHYSICIAN</b>	
Persons having temporary irritation may respond to treatment with antihistamines or steroid creams and/or systemic steroids.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b>	
For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call <b>1-800-888-8372</b>	

050534-00211.20030214.PPE User Saf Cntr.Chemig Bkl.pdf  
 DAC ZN 50534-211A NOTIF 2/14/03  
 Notification - PPE, User Safety etc. on container, chemigation reference in booklet  
 Page 3 of 21

**Personal Protective Equipment (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

For exposures in enclosed areas, applicators and other handlers must wear a respirator with an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

**User Safety Recommendations**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**Environmental Hazards**

This product is toxic to fish, aquatic invertebrates, and marine/estuarine organisms. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. DO NOT apply when weather conditions favor drift from treated areas. Apply only to areas specified on label. DO NOT contaminate water when disposing of equipment washwaters.

6/24

## DIRECTIONS FOR USE

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

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement 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 48 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

7/24

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Keep children and domestic animals off treated areas until this material has been washed into the soil.**

**STORAGE AND DISPOSAL**

DO NOT contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

**Storage**

Store in a cool place. Protect from excessive heat.

**Pesticide Disposal**

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

**Container 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.

Zinc is incorporated into this formulation as a micronutrient to provide plants with zinc required for growth.

DO NOT combine Daconil Zn in the spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurious under your conditions of use. DO NOT combine Daconil Zn with DiPel 4L, Foil, Triton AG-98, Triton B-1956, Latron B-1956 or Latron AG-98 as phytotoxicity may result from the combination when applied to some species on this label.

The required amount of Daconil Zn should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of Daconil Zn in a clean

container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations.

**Golf Course Fairways, Lawns & Other Turfgrasses:**

Not for use on residential (home) lawns.

Apply Daconil Zn in 30 to 40 gallons of water per acre. Begin applications when conditions favor disease development and repeat applications as long as these conditions persist. Under severe disease conditions use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

DO NOT mow or water after treatment until spray deposited on turfgrass is thoroughly dry; Daconil Zn should always be used in conjunction with good turf management practices. Do not use on fine fescue turf.

<b>Diseases Controlled*</b>	<b>Interval of Application</b>	<b>Application Rate Per Acre</b>
1. Dollar spot	7-10 days	4 <sup>ab</sup> to 8 pts
	14-21 days	8 to 14 pts
2. Leaf spot, Melting-out, Brown blight	7-10 days	8 pts
	14-21 days	8 to 14 pts
3. Brown patch	7-14 days	8 to 14 pts
4. Gray leaf spot	7-10 days	8 to 16 pts
5. Red thread	7-10 days	8 to 24 pts
6. Anthracnose	7-14 days	12 to 24 pts

<sup>ab</sup> Low rate is not effective on intensively mowed turfgrasses such as golf course tees and greens.

**Golf Course Tees, Greens and Ornamental Turfgrass:**

Apply Daconil Zn in an adequate amount of water to provide complete coverage. This amount may vary from 90 to 450 gallons per acre. See below for suggested rates and timing. Under severe disease conditions, use the high rate and apply on a 7 day schedule. Do not use on fine fescue turf.



9/24

Diseases Controlled*	Interval of Application	Rate: Liquid Ounces Per 1,000 Sq. Ft.	
		Before Disease Occurs	After Disease Has Occurred
1. Dollar spot	7-14 days	3 - 6	6 - 11
2. Brown patch	7-14 days	3 - 6	6 - 11
3. Leaf spots, Melting-out	7-10 days	3 - 6	6 - 11
4. Gray leaf spot	7-10 days	3 - 6	6 - 11
5. Red thread	7-10 days	3 - 9	9 - 11
6. Anthracnose	7-14 days	5 - 9	--
7. Copper spot	7-10 days	6 - 9	9 - 11
8. Stem rust (bluegrass)	7-14 days	6 - 9	9 - 11
9. DICHONDRA: Leaf spot (California only)	7-14 days	6 - 9	9 - 11

\*Diseases listed are caused by fungi, some of which are named as follows:

1. Dollar spot: *Sclerotinia homeocarpa*; *Lanzia* or *Moellerodiscus* spp.
2. Brown patch: *Rhizoctonia solani*, *R. zea*, *R. cerealis*
3. Leaf spots, Melting-out, Brown blight: *Drechslera* spp. (including *D. poae*, *D. siccans*), *Bipolaris sorokiniana*, *Curvularia* spp.
4. Gray leaf spot: *Pyricularia grisea*, *P. oryzae*
5. Red thread: *Laetisaria fuciformis*
6. Anthracnose: *Colletotrichum graminicola*
7. Copper spot: *Gloeocercospora sorghi*
8. Stem rust: *Puccinia graminis*
9. Dichondra leaf spot: *Alternaria* spp.

**Gray snow mold caused by *Typhula* spp.** - Apply in sufficient water to obtain adequate coverage (2 to 10 gallons per 1,000 square feet). Apply 8 to 16 fluid ounces of Daconil Zn per 1,000 square feet of turf area. Application must be made before snow cover in autumn. Use the higher rate if turf layer remains frozen prior to snow cover. If snow cover is intermittent or lacking during the winter, re-apply Daconil Zn at 8 fluid

10/24

ounces per 1,000 square feet at monthly intervals until gray snow mold conditions no longer prevail. In areas where pink snow mold (*Gerlachia* or *Fusarium* patch) is likely to occur, apply Daconil Zn at 8 fluid ounces per 1,000 square feet in combination with products containing either benomyl at 1 ounce active ingredient per 1,000 square feet, or iprodione at 2 ounces active ingredient per 1,000 square feet of turf area. Read and observe all label directions for products containing these active ingredients.

**Fusarium (*Gerlachia*) Patch:** For control of *Fusarium* patch only in areas where snow cover is intermittent or lacking during the winter, apply 8 to 14 fluid ounces of Daconil Zn per 1,000 square feet of turf area. Begin applications in late autumn and re-apply at 21 to 28 day intervals until conditions favorable for *Fusarium* patch no longer prevail.

**Algae:** For prevention of algae on turfgrasses, apply Daconil Zn at the rate of 3 to 6 fluid ounces per 1,000 square feet on a 7 to 14 day schedule. Under severe algae conditions, use the high rate and apply on a 7 day schedule. When algae is well established, every attempt should be made to dry out the afflicted area. Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with Daconil Zn applications at the rate of 6 to 11 fluid ounces per 1,000 square feet on a 7 to 14 day schedule. Several applications of Daconil Zn at the high rate may be necessary for turfgrass recovery. Only a preventive spray program with Daconil Zn will prevent a recurrence of the algae when environmental conditions are favorable.

#### **Ornamental Plants**

Apply Daconil Zn at a rate of 2 pints per 100 gallons of water unless other directions are given in the tables below. Apply in a spray to run-off, when conditions are favorable for disease development. Repeat applications at 7 to 14 day intervals until conditions are no longer favorable. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, apply Daconil Zn at 7 day intervals. Daconil Zn should be applied to plants when both foliage and flowers are dry, or nearly dry.

DO NOT combine Daconil Zn in the spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination to be physically compatible, effective and noninjurious under your conditions of use.

Daconil Zn may be used in greenhouses. DO NOT use mistblowers or high pressure spray equipment when making applications of Daconil Zn in greenhouses.

Use of Daconil Zn is recommended for control of fungal diseases referred to by numbers in parentheses following each ornamental. Ornamentals listed on this label have been tested and found to tolerate applications of Daconil Zn at the recommended rates. The user should test for possible phytotoxic responses, using recommended rates on ornamental plants on a small area prior to commercial use. Applications made during bloom may damage flowers and/or fruits.

**Fruits and other structures which may be borne on treated plants MUST NOT BE**

11/24

**EATEN.**

**Ornamentals Recommended for Treatment with Daconil Zn**

---

**BROADLEAF SHRUBS AND TREES**

- |                            |                            |
|----------------------------|----------------------------|
| Andromeda (Pieris) (4)     | Holly (1)                  |
| Ash (Fraxinus) (1)         | Lilac (5)                  |
| Aspen (1)                  | Magnolia (1)               |
| Azalea (1,2,4)             | Maple (1)                  |
| Buckeye, Horsechestnut (1) | Mountain Laurel (1)        |
| Cherry-Laurel (1)          | Oak (red group only) (1,7) |
| Crabapple (1,6,8)          | Oregon-Grape (Mahonia) (6) |
| Dogwood (1)                | Photinia (1)               |
| Eucalyptus (3)             | Poplar (1)                 |
| Euonymus (1)               | Privet (Ligustrum) (1)     |
| Firethorn (Pyracantha) (1) | Rhododendron (1,2,4)       |
| Flowering Almond (1,2)     | Sand Cherry (1,2)          |
| Flowering Cherry (1,2)     | Sequoia (1)                |
| Flowering Peach (1,2)      | Spiraea (1)                |
| Flowering Plum (1,2)       | Sycamore, Planetree (1)    |
| Flowering Quince (1,2)     | Viburnum (5)               |
| Hawthorn (1,6)             | Walnut (Juglans) (1)       |
- 

**FLOWERING PLANTS<sup>a/</sup> AND BULBS**

- |                                |                              |
|--------------------------------|------------------------------|
| Arabian Violet (2)             | Iris (1,2)                   |
| Begonia (1)                    | Lily (1)                     |
| Camellia (2)                   | Marigold (1)                 |
| Carnation (1,2)                | Narcissus (1)                |
| Chrysanthemum (1,2)            | Pansy (1)                    |
| Crocus (1)                     | Petunia (1,4)                |
| Daffodil (1)                   | Phlox (1)                    |
| Daisy (1)                      | Poinsettia <sup>b/</sup> (1) |
| Geranium (1,6)                 | Rose <sup>c/</sup> (1)       |
| Gladiolus (1,2)                | Statice (1)                  |
| Hollyhock (6)                  | Tulip (1)                    |
| Hydrangea (foliage only) (1,6) | Zinnia (1,5)                 |

<sup>a/</sup> Avoid applications during bloom period on plants where flower injury is unacceptable.  
<sup>b/</sup> Discontinue applications prior to bract formation; phytotoxicity is possible on the bracts.  
<sup>c/</sup> Use 1.5 pints per 100 gallons of water.

---

12/24

**FOLIAGE PLANTS**

- |                             |                               |
|-----------------------------|-------------------------------|
| Aglaonema (1)               | Ming aralia (1)               |
| Areca palm (1)              | Oyster plant (Rhoeo) (1)      |
| Artemesia (1)               | Pachysandra <sup>d</sup> (1)  |
| Boston fern (1)             | Parlor palm (Chamaedorea) (1) |
| Dumbcane (Diffenbachia) (1) | Peperomia (1)                 |
| Dracaena (1)                | Philodendron (1,4)            |
| Fatsia (Aralia) (1)         | Prayer plant (Maranta) (1)    |
| Ficus (1)                   | Syngonium (1)                 |
| Florida Ruffle Fern (1)     | Zebra plant (Aphelandra) (1)  |
| Leatherleaf Fern (1)        |                               |
| Lipstick plant (1)          |                               |

<sup>d</sup> Use 4 pints of Daconil Zn per 100 gallons of water.

---

**Diseases Controlled with Daconil Zn**

---

**1. Leafspots/Follar Blights:**

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| Actinopelte leafspot                  | Fabraea (Entomosporium) leafspot      |
| Alternaria leafspot/leaf blight       | Fusarium leafspot                     |
| Anthraxnose leaf blotch, spot         | Gloeosporium black leafspot           |
| Anthraxnose (Discula) blight          | Ink spot (Drechslera)                 |
| Ascochyta blight                      | Marssonina leafspot                   |
| Bipolaris (Helminthosporium) leafspot | Monilinia blossom blight, twig blight |
| Black spot on roses                   | Mycosphaerella ray blight             |
| Botrytis leafspot, leaf blight        | Myrothecium leafspot, brown rot       |
| Cephalosporium leafspot               | Nematostoma leaf blight               |
| Cercospora leafspot                   | Phyllosticta leafspot                 |
| Cercosporidium leafspot               | Ramularia leafspot                    |
| Corynespora leafspot                  | Rhizoctonia web blight                |
| Coryneum blight (shothole)            | Septoria leafspot                     |
| Curvularia leafspot                   | Sphaeropsis leafspot                  |
| Cylindrosporium leafspot              | Stagonospora leaf scorch              |
| Dactylaria leafspot                   | Tan leafspot (Curvularia)             |
| Didymellina leafspot                  | Volutella leaf blight                 |
| Drechslera leafspot                   |                                       |

**2. Flower spots/blights:**

- |                                     |                           |
|-------------------------------------|---------------------------|
| Botrytis flower spot, flower blight | Ovulinia flower blight    |
| Curvularia flower spot              | Rhizopus blossom blight   |
| Monilinia blossom blight            | Sclerotinia flower blight |

**3. Cylindrocladium stem canker**

13/24

- 4. **Phytophthora leaf blight, dieback**
- 5. **Powdery mildews:**  
Erysiphe cichoracearum                      *Microsphaera* spp.
- 6. **Rusts:**  
*Gymnosporangium* spp.                      *Puccinia* spp.  
Pucciniastrum hydrangeae
- 7. **Taphrina blister**
- 8. **Scab (Venturia inaequalis)**

The following ornamental plant species which have been tested with Daconil Zn at recommended rates did not exhibit phytotoxicity:

<b>Botanical Name</b>	<b>Common Name</b>
Aechmea fasciata	Aechmea
Araucaria heterophylla	Norfolk Island Pine
Asplenium nidus	Birdnest Fern
<i>Bougainvillea</i> spp.	Bougainvillea
Caladium spp.	Caladium
Calathea makoyana	Peacock plant
Calistephus chinensis	Aster
Carissa grandiflora	Natal plum
Clerodendron thomsonae	Bleeding Heart
<i>Codiaeum</i> spp.	Croton
Cordyline terminalis	Ti Plant
Crassula argentea	Jade Plant
Cyrtomium falcatum	Holly Leaf Fern
Dionaea muscipula	Venus Fly Trap
Dizygotheca elegantissima	False Aralia
Epipremnum aureum	Golden Pothos, Scindapsus
Episcia cupreata	Flame Violet
<i>Fittonia</i> spp.	Silver-nerve Plant
Gerbera jamesonii	Gerbera Daisy
Gynura sarmentosa	Purple Passion Vine
Gypsophila paniculata	Baby's Breath
<i>Hoya</i> spp.	Wax Plant
Ilex cornuta	Chinese Holly
Ilex crenata	Japanese Holly
<i>Impatiens</i> spp.	Impatiens
Pilea cadierei	Aluminum Plant
<i>Platynerium</i> spp.	Staghorn Fern
Sansevieria trifasciata "Hahnii"	Birdsnest Sansevieria

14/24

Tolmeia menziesii  
 Yucca elephantipes  
 Zygocactus truncatus

Piggy-back Plant  
 Spineless Yucca  
 Christmas Cactus

**NOTE:** DO NOT apply Daconil Zn to either green or variegated Pittosporum or to Schefflera, as multiple applications have been demonstrated to cause phytotoxic responses.

**Conifers:** Apply Daconil Zn in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Application with ground equipment is preferable to aerial application because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not feasible, Daconil Zn may be applied with aircraft using at least 20 gallons per acre. When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of Daconil Zn listed may be used. DO NOT allow livestock to graze in treated areas. The following spray volumes are recommended as gallons of spray per acre:

	DILUTE	CONCENTRATE
Forest stands	Not used	10 to 20 (aircraft)
Christmas trees	100	10 to 50 (aircraft or ground equipment)
Nursery beds	100	5 to 10 (ground equipment only)

DISEASE CONTROLLED	Daconil Zn RATE PER		APPLICATION DIRECTIONS
	ACRE	100 GAL*	
Swiss needlecast	4 to 8 pts	4 to 8 pts	Single application technique: In Christmas tree plantations or forest stands make one application in the spring when new shoot growth is 1/2 to 2 inches in length.
Scleroderris canker (pines), Swiss needlecast (Douglas-fir)	2 to 4 pts	2 to 4 pts	Make the first application in spring when new shoot growth is 1/2 to 2 inches in length. Make additional applications at 3 to 4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3 week schedule.
Sirococcus tip blight	3 to 5 pts	3 to 5 pts	
Rhizosphaera needlecast (spruces), Scirrhial brown spot (pines)	8 pts	8 pts	
Cyclaneusma and Lophodermium needlecasts (pines)	4 to 8 pts	4 to 8 pts	Apply in early spring prior to budbreak. Repeat applications at approximately 6 to 8 week intervals.

15/24

DISEASE CONTROLLED	Daconil Zn RATE PER		APPLICATION DIRECTIONS
	ACRE	100 GAL*	
			until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
Rhabdocline needlecast (Douglas-fir)	2 to 4 pts	2 to 4 pts	Apply at budbreak and repeat at 3 to 4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use the high rate on a 3 week schedule.
Botrytis seedling blight Phoma twig blight	2 to 4 pts	2 to 4 pts	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7 to 14 day intervals as long as disease favorable conditions persist.

\*Volumetric rates to be used only with full dilute spray volume specified on this label.

**Application and Calibration Techniques for Sprinkler Irrigation - Chemigation**

Apply this product only through center pivot, motorized lateral move, solid set or portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system. DO NOT use Daconil Zn through sprinkler irrigation equipment on golf courses.

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.

16/24

**DO NOT apply this product through irrigation systems connected to a public water system. "Public water system" means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year.**

**Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.**

**The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.**

**Always inject Daconil Zn into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.**

**Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.**

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

**Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.**

**Daconil Zn may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.**

#### **A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment**

**For injection of pesticides, these continuously moving systems must use a positive displacement injection pump, of either diaphragm or piston type, constructed of**



17/24

materials that are compatible with pesticides and capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered.

Thoroughly mix recommended amount of Daconil Zn for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Daconil Zn has been cleared from last sprinkler head.

**B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment**

With stationary systems, an effectively designed in-line venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of Daconil Zn for acreage to be covered with water so that the total mixture of Daconil Zn plus water in the injection tank is equal to the quantity of water used during calibration, and operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration. Agitation is recommended. Daconil Zn can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until Daconil Zn has been cleared from last sprinkler head.

Daconil Zn<sup>®</sup>, Super WeatherStik<sup>™</sup>, Turf Care<sup>®</sup> and the Syngenta logo are trademarks of a Syngenta Group Company.

DiPel<sup>®</sup> is a registered trademark of Valent BioSciences

Foil<sup>®</sup> is a registered trademark of Ecogen, Inc.

Latron B-1956<sup>™</sup> and B-1956<sup>™</sup> are trademarks of Dow Chemical Co.

© 2003 Syngenta

18/24

050534-00211.20030214.PPE User Saf Cntr.Chemig Bkl.pdf  
DAC ZN 50534-211A NOTIF 2/14/03

Notification – PPE, User Safety etc. on container, chemigation reference in booklet  
Page 17 of 21

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

GB Biosciences Corporation  
Greensboro, North Carolina 27409  
[www.syngenta-us.com](http://www.syngenta-us.com)

SCP 50534-211A

DAC ZN 50534-211A NOTIF – tk – 2/14/03

19/24

Base (Container) Label

**Daconil Zn®**

**Flowable Fungicide**

**Turf Care®**

**Turf and Ornamental Fungicide**



Active Ingredient:	
<u>Chlorothalonil (tetrachloroisophthalonitrile) .....</u>	<u>38.5%</u>
<u>Other Ingredients:</u>	<u>61.5%</u>
Total:	100.0%

Contains 4.17 pounds chlorothalonil active ingredient per gallon (500 grams per liter)

EPA Reg. No. 50534-211

EPA Est. No. 50534-TX-001

**KEEP OUT OF REACH OF CHILDREN.**

**WARNING/AVISO**

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

See directions for use in attached booklet.

<p><b>AGRICULTURAL USE REQUIREMENTS</b></p> <p>Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.</p>
--

20/24

## Precautionary Statements

### Hazards to Humans and Domestic Animals

Causes substantial but temporary eye injury. Harmful if swallowed, or absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin. DO NOT get in eyes or on clothing. DO NOT take internally.

**Note to User:** This product may produce mild bronchial irritation and temporary irritation of the skin characterized by redness or rash on exposed skin areas. Affected persons should consult a physician.

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• 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.</li></ul>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Immediately flush eyes with plenty of water and continue for 15 minutes. Seek medical attention for eyes immediately.</li></ul>
<b>If on skin</b>	<ul style="list-style-type: none"><li>• Wash with plenty of soap and water. Get medical attention.</li></ul>
<b>NOTE TO PHYSICIAN</b>	
Persons having temporary irritation may respond to treatment with antihistamines or steroid creams and/or systemic steroids.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b>	
For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call <b>1-800-888-8372</b>	

21/24

## **Personal Protective Equipment (PPE)**

### **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

For exposures in enclosed areas, applicators and other handlers must wear a respirator with an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

### **User Safety Recommendations**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### **Environmental Hazards**

This product is toxic to fish, aquatic invertebrates, and marine/estuarine organisms. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. DO NOT apply when weather conditions favor drift from treated areas. Apply only to areas specified on label. DO NOT contaminate water when disposing of equipment washwaters.

22/24

## **Storage and Disposal**

DO NOT contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

### **Storage**

Store in a cool place. Protect from excessive heat.

### **Pesticide Disposal**

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

### **Container 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.

### **Chemigation**

Refer to supplemental labeling in attached booklet for use directions on chemigation. Do not apply this product through any type of irrigation system, unless the supplemental labeling on chemigation is followed.

Daconil Zn<sup>®</sup>, Super WeatherStik<sup>™</sup>, Turf Care<sup>®</sup> and the Syngenta logo are trademarks of a Syngenta Group Company.

© 2003 Syngenta

GB Biosciences Corporation  
Greensboro, North Carolina 27409  
www.syngenta-us.com

SCP 50534-211A

2.5 gallons  
U.S. Standard Measure

DAC ZN 50534-211A NOTIF – tk – 2/14/03  
Product ID. 31214

**NOTIFICATION**

**FEB 28 2003**

# GB BIOSCIENCES™ CORPORATION

410 Swing Road  
P.O. Box 18300  
Greensboro, NC 27409

Telephone (336) 632-2380  
Fax (336) 292-6374

## FEDERAL EXPRESS

February 14, 2003

Mr. Rich Keigwin  
Chief- Fungicide Branch  
Document Processing Desk (NOTIF)  
Office of Pesticide Programs (H7504C)  
U.S. Environmental Protection Agency  
1921 Jefferson Davis Highway  
Crystal Mall 2 – Room 266A  
Arlington, VA 22202

**Subject: Submission of Notification**  
**Bravo Zn (EPA Reg. No 50534-204)**  
**Daconil Zn (EPA Reg. No. 50534-211)**

Dear Mr. Keigwin / Ms. Kearn

Per PR Notice 98-10, GB Biosciences Corporation herein submits via NOTIFICATION three copies of subject labels. The following changes were incorporated on these labels:

1. For both Bravo Zn and Daconil Zn the word "chemigation" was added to heading subtitled "Application and Calibration Techniques for Sprinkler Irrigation"
2. For Daconil Zn the PPE and User Recommendations section were added to the front panel of the label. These statements were on the previous version of GB label and were omitted. The omitted sections have now been added to the label.

This notification is consistent with the provisions of PR Notice 98-10 and EPA Regulations 40 CFR 152.46 and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of U. S. C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Section 12 and 14 of FIFRA.

34/24

# GB BIOSCIENCES™ CORPORATION

410 Swing Road  
P.O. Box 18300  
Greensboro, NC 27409

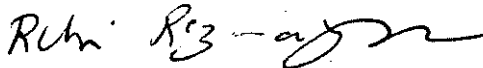
Telephone (336) 632-2380  
Fax (336) 292-6374

Enclosed are:

- Three copies of Final Printed Labeling including a highlighted copy
- Completed EPA Application for Pesticide Registration Forms 8570-1 for both products

Please contact me at 336.632.7381 or my Regulatory Assistant, Trina Brodie at 336.632.2062, if you have any questions regarding this submission.

Sincerely,



Ruhi Rezaaiyan  
Regulatory Product Manager  
Enclosure