AUG 1 3 1992

Mr. Ralph P. Burton ISK Biotech Corporation P.O. Box 8000 Mentor, OH 44061-8000

Dear Mr. Burton:

Subject: Expanded Directions for Use

Daconil 2787 Flowable Fungicide EPA Registration No. 50534-9

Your Submission Dated January 6, 1992

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

- 1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a)
 when the Agency requires all registrants of similar products to
 submit such data.
- 2. Submit one (1) copy of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Col Carrie Color

Cynthia Giles-Parker Product Manager (22)

Fungicide-Herbicide Branch Registration Division (H7505C)

Enclosure

Net Contents:

Logo:

DACONIL 2787^R Flowable Fungicide

Turf Care^R Turf and Ornamental Fungicide

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

*Covered under U.S. Patent No. 3,290,353 and No. 3,331,735 and No. 5,748,636

EPA Reg. No. 50534-9

EPA Est, No. 50534-TX-01

ACCEPTED
with COMMENTS
In EPA Letter Dated:

KEEP OUT OF REACH OF CHILDREN

WARNING

See precautionary statements

AUG 1 3 1002

Under the Federal Insecticide Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 50534-9

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING

Causes substantial but temporary eye injury. Wear long sleeve shirt, long pants, gloves, goggles or face shield when handling this product. 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. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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.

DO NOT apply this product in such a manner as to directly, or through drift, expose workers or other persons. The area being treated must be vacated by unprotected persons.

FIRST AID

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 in eyes: Immediately flush eyes with plenty of water and continue for 15 minutes. Seek medical attention for eyes immediately.

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

Note to physician: Persons having temporary irritation may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

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.

DIRECTIONS FOR USE

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

Note to User: Wear long sleeve shirt, long pants, gloves, and goggles or face shield while mixing, loading and applying this product.

Do not combine DACONIL 2787 Flowable Fungicide 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 2787 Flowable Fungicide 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.

Dipel is a registered trademark of Abbott Laboratories. Foil is a registered trademark of Ecogen Corporation. Triton AG-98, Triton I 1956, Latron B-1956 and Latron AG-98 are trademarks of Rohm and Haas Company.

The required amount of DACONIL 2787 Flowable Fungicide should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of DACONIL 2787 Flowable Fungicide 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:

Apply DACONIL 2787 Flowable Fungicide 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 2787 Flowable Fungicide should always be used in conjunction with good turf management practices.

Diseases Controlled*	Interval of Application	Application Rate Per Acre
1. Dollar spot	7-10 days 14-21 days	4 ^{a/} to 8 pts 8 to 14 pts
2. Leaf spot, Melting-out, Brown blight	7-10 days 14-21 days	8 pts 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

a/ Low rate is not effective on intensively mowed turfgrasses such as golf course tees and gieens.

Golf Course Tees, Greens and Ornamental Turfgrass:

Apply DACONIL 2787 Flowable Fungicide 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.

Diseases Controlled	Interval of Application	Rate: Liquid Ounce Before Disease Occurs	es Per 1,000 Sq. Ft. 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	7-15 Jays	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. zeae, R. cerealis

4. Gray leaf spot: Pyricularia grisea. P. oryzae

5. Red thread: Laetisaria fuciformis

6. Anthracnose: Colletotrichum graminicola

7. Copper spot: Gloeocercospora arghi

8. Stem rust: Puccinia graminis

9. Dichondra leaf spot: Altarnaria spp.

^{3.} Leaf spots, Melting-out, Brown blight: <u>Drechslera</u> spp. (including <u>D. poae</u>, <u>D. siccans</u>), <u>Bipolaris sorokiniana</u>, <u>Curvularia</u> 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 2787 Flowable Fungicide 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 2787 Flowable Fungicide at 8 fluid 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 2787 Flowable Fungicide 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 2787 Flowable Fungicide 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.

Algal Scum: For prevention of algal scum on turfgrasses caused by cyanobacteria of the genus Lyngbia, apply DACONIL 2787 FLOWABLE FUNGICIDE at the rate of 3 to 6 ounces per 1000 square feet on a 7 to 14 day schedule. Under severe scum conditions, use the high rate and apply on a 7 day schedule. When algal scum is well established, every attempt should be made to dry out the afflicted area. Once dry, spiki g or verticutting should be done to enhance turfgrass recovery in conjunction with DACONIL 2787 FLOWABLE FUNGICIDE applications at the rate of 6 to 11 ounces per 1000 square feet on a 7 to 14 day schedule. Several applications of DACONIL 2787 FLOWABLE FUNGICIDE at the high rate may be necessary for turfgrass recovery. Only a preventive spray program with DACONIL 2787 FLOWABLE FUNGICIDE will prevent a recurrence of the algae when environmental conditions are favorable for algal growth.

Ornamental Plants:

Apply DACONIL 2787 Flowable Fungicide 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 2787 at 7 day intervals. DACONIL 2787 should be applied to plants when both foliage and flowers are dry, or nearly dry.

Do not combine DACONIL 2787 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 2787 may be used in greenhouses. Applicators and attending personnel should wear protective clothing including long sleeves, gloves, goggles or face shield plus a face-fitting respirator specifically designed to remove organic pesticide vapors and particulates. Do not use mistblowers or high pressure spray equipment when making applications of DACONIL 2787 in greenhouses.

Use of DACONIL 2787 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 2787 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 EATEN.

ORNAMENTALS RECOMMENDED FOR TREATMENT WITH DACONIL 2787 Flowable Fungicide

BROADLEAF SHRUBS AND TREES

Andromeda (Pieris) (4) Ash (Fraxinus) (1)

Aspen (1) Azalea (1,2,4)

Buckeye, Horsechestnut (1)

Cherry-Laurel (1) Crabapple (1,6,8) Dogwood (1) Eucalyptus (3) Euonymus (1)

Firethorn (Pyracantha) (1)
Flowering Almond (1,2)
Flowering Cherry (1,2)
Flowering Peach (1,2)

Flowering Plum (1,2) Flowering Quince (1,2)

Hawthorn (1.6)

Holly (1) Lilac (5) Magnolia (1) Maple (1)

Mountain Laurel (1)
Oak (red group only) (1,7)

Oregon-Grape (Mahonia) (6)

Photinia (1) Poplar (1)

Privet (Ligustrum) (1) Rhododendron (1,2,4) Sand Cherry (1,2)

Sequoia (1) Spiraea (1)

Sycamore, Planetree (1)

Viburnum (5)

Walnut (Juglans) (1)

FLOWERING PLANTS^{a/} 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) Phlox (1) Poinsettia b/ (1) Rose (1) Daffodil (1) Daisy (1) Geranium (1,6) Gladiolus (1,2) Statice (1) Tulip (î) Hollyhock (6) Hydrangea (foliage only) (1,6) Zinnia (1.5)

a/ Avoid applications during bloom period on plants where flower injury is unacceptable.

b/ Discontinue applications prior to bract formation; phytotoxicity is possible on the bracts c/ Use 1.5 pints per 100 gallons of water.

FOLIAGE PLANTS

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

d/ Use 4 pints of DACONIL 2787 Flowable Fungicide Fungicide per 100 gallons of water

DISEASES CONTROLLED WITH DACONIL 2787 Flowable Fungicide

- 1. Leafspots/ Foliar Blights: Actinopelte leafspot Alternaria leafspot/leaf blight Anthracnose leaf blotch, spot Anthracnose (Discula) blight Ascochyta blight Bipolaris (Helminthosporium) leafspot Botrytis leafspot, leaf blight Cephalosporium leafspot Cercospora leafspot Cercosporidium leafspot Corvneum blight (shothole) Corynespora leafspot Curvularia leafspot Cylindrosporium leafspot Dactylaria leafspot Didymellina leafspot Drechslera leafspot
- 2. Flower spots/blights:
 Botrytis flower spot, flower blight
 Curvularia flower spot
 Ovulinia flower blight
- 3. Cylindrocladium stem canker
- 4. Phytophthora leaf blight, dieback
- 5. Powdery mildews:
 Microsphaera spp.
 Erysiphe cichoracearum
- 6. Rusts:
 Gymnosporangium spp.
 Puccinia spp.
 Pucciniastrum hydrangeae
- 7. Taphrina blister
- 8. Scab (Venturia inaequalis)

Fabraea (Entomosporium) leafspot Fusarium leafspot Gloeosporium black leafspot Ink spot (Drechslera) Marssonina leafspot Monilinia blossom blight, twig blight Mycosphaerella ray blight Myrothecium leafspot, brown rot Nematostoma leaf blight Phyllosticta leafspot Rhizoctonia web blight Ramularia leafspot Septoria leafspot Sphaeropsis leafspot Stagonospora leaf scorch Tan leafspot (Curvularia) Volutella leaf blight

Monilinia blossom blight Rhizopus blossom blight Sclerotinia flower blight

The following ornamental plant species which have been tested with DACONIL 2787 at recommended rates did not exhibit phytotoxicity:

Botanical Name

Aechmea fasciata Araucaria heterophylla Asplenium nidus Bougainvillea spp. Caladium spp. Caladium spp. Calathea makoyana Calistephus chinensis Carissa grandiflora Clerodendron thomsonae Codiaeum spp.

Codiaeum spp. Cordyline terminalis Crassula argentea Cyrthomium falcatum Dionaea muscipula Dizygotheca elegantissima Epipremnum aureum

Episcia cupreata
Fittonia spp.
Gerbera jamesonii
Gynura sarmentosa
Gypsophila paniculata

Hoya spp.
Ilex cornuta
Ilex crenata
Impatiens spp.
Pilea cadierei
Platycerium spp.
Pleomele thalioides

Sansevieria trifasciata "Hahnii"

Tolmeia menziesii Yucca elephantipes Zygocactus truncatus

Common Name

accumic		
Norfolk	Island	Pine
Birdnest		
Rougain	villes	

Bougainvillea Caladium Peacock plant

Aster
Natal plum
Bleeding Heart

Croton
Ti Plant
Jade Plant
Holly leaf Fern
Venus Fly Trap
False Aralia

Golden Pothos, Scindapsus

Flame Violet
Silver-nerve Plant
Gerbera Daisy
Purple Passion Vine
Baby's Breath
Wax Plant

Chinese Holly
Japanese Holly
Impatiens
Aluminum Plant
Staghorn Fern
Lance Rleamele
Birdsnest Sansevieria
Piggy-back Plant
Spineless Yucca
Christmas Cactus

NOTE: DO NOT apply DACONIL 2787 to either green or variegated Pittosporum or to Schefflera, as multiple applications have been demonstrated to cause phytotoxic responses.

APPLICATION AND CALIBRATION TECHNIQUES FOR SPRINKLER IRRIGATION

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 2787 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.

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 2787 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 orf.

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.

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be ported in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

Daconil 2787 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
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.

Thoroughly Mix recommended amount of Daconil 2787 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 2787 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 2787 for acreage to be covered with water so that the total mixture of Daconil 2787 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 2787 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 2787 has been cleared from last sprinkler head.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

STORAGE: Store in a dry place.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper aisposal 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: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay or of smoke.

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants that this material conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use and Buyer assumes the risk of any use contrary to such directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO EXCEPT IN WRITING WITH A SPECIFIC REFERENCE TO THIS WARRANTY. In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.