

PM 23 707-245

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APR - 6 1998

Mr. James D. Davis
Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA 19106-2399

Dear Mr. Davis:

Subject: Dimension® Turf Herbicide
EPA Registration No. 707-245
Application and Letter Dated March 26, 1998, Request
To Amend Registration by the Addition of Seashore
Paspalum as a Tolerant Warm-Season Grass Site of
Application and Additions of Use Precautions and
Restriction of Use

The proposed labeling submitted with your March 26, 1998 application and letter has been reviewed and found acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, provided that you revise the labeling as indicated by the following comments:

1. Under the section "TANK MIXTURES" on page 8, the claim "....., a tank mixture of this product and an EPA-registered pesticide will provide control of susceptible pests listed on the respective label for the two products." must be deleted from this label. You must name the products with which this product can be tank mixed. As written this label allows no other tank mixtures than those with MSMA and Acclaim®.
2. Delete the Section: "General Information for Home Owner Use on Residential Turf and Ornamental Beds". A separate complete label must be submitted if you wish to have both a "Professional Use" and a "Home Owner Use" label under this registration.
3. Submit one (1) copy of your final printed labeling before your release the product for shipment, under the subject amended labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA,

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section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Responses to this application and future labeling must be appropriately highlighted. Only the words changed in the text should be highlighted, not the entire sentence or paragraph; unless they are new, as with the subject labeling. A description of each amendment must be submitted with the application and listed in order from front to the back of label, (beginning to the end). A hand highlighted copy is preferred if paragraphs and sentences are moved within the text of the label.

Applications for amendments to registration must conform with "EPA General Information on Applying for Registration of Pesticides in the United States". Please use EPA application Form 8570--1 completed in required detail.

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

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

E. Wilson: Diskette Dithiopyr CONCURRENTS 98

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DIMENSION[®]

TURF and ORNAMENTAL HERBICIDE



Dimension is a selective herbicide formulated as an emulsifiable concentrate that provides control of listed annual grasses and broadleaf weeds in established lawns, commercial sod farms, ornamental turf and landscape ornamentals, including golf course fairways, roughs, tee boxes, and putting greens.

NOT FOR USE OR SALE IN NEW YORK STATE EXCEPT AS ALLOWED UNDER SPECIAL LOCAL NEED REGISTRATION NUMBER EPA SLN NO. NY-950001.

ACTIVE INGREDIENT

*Dithiopyr, 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethyl ester	12.7%
INERT INGREDIENTS	87.3%
	100.0%

**ACCEPTED
with COMMENTS
In EPA Letter Dated**

APR - 6 1998

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

707-245

Contains petroleum distillates.

*Contains 120 grams per litre or 1 pound per U.S. gallon of the active ingredient.
Product protected by U.S. Patent No. 4,692,184. Other patents pending

EPA REG NO. 707-245

REFORMULATION OR REPACKAGING IS PROHIBITED

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

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).

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES- Immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN- Immediately flush with plenty of water while removing contaminated clothing. As soon as soap is available, wash skin thoroughly with soap and water. Wash clothing before reuse. Sensitized persons should avoid further contact and reuse of contaminated clothing. Get medical attention.

IF SWALLOWED- DO NOT induce vomiting. Give large quantities of water. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED- Remove individual to fresh air. Seek medical attention if breathing difficulty develops.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY.

CAUSES SKIN IRRITATION.

HARMFUL IF SWALLOWED.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

MAY CAUSE ALLERGIC SKIN REACTION.

Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or spray mist.

Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical-resistance category selection chart.

Applicators and other handlers (other than mixers or loaders) must wear:

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- Coveralls over short-sleeved shirt and short pants
- Socks
- Chemical resistant footwear
- Protective eyewear
- Chemical-resistant gloves such as Barrier Laminate or Viton ≥ 14 mils

Mixers and Loaders must wear:

- Coveralls over short-sleeved shirt and short pants
- Socks
- Chemical resistant footwear
- Protective eyewear
- Chemical-resistant gloves such as Barrier Laminate or Viton ≥ 14 mils
- Chemical-resistant apron

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 Standards(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 PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift and runoff from treated turf may adversely affect aquatic organisms in adjacent aquatic sites. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. 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.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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 over short-sleeved shirt and short pants
- Socks
- Chemical resistant footwear
- Protective eyewear
- Chemical-resistant gloves such as Barrier Laminate or Viton ≥ 14 mils

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 unprotected persons out of treated area until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

STORAGE- Store this product only in its original container in a dry, cool, secured storage area. Store this product above 32°F to avoid crystallization. If crystals form or product freezes, move product to area with ambient temperature above 32°F and shake well until crystals have dissolved.

PRODUCT DISPOSAL- Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

EMPTY CONTAINER DISPOSAL- Do not reuse emptied container. Observe all label safeguards until container is triple rinsed. Emptied container retains vapor and product residue. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. IF burned, stay out of smoke.

SPILL- In case of spill, observe all protective and safety precautions when cleaning up spills. Dispose of material according to "product disposal" directions listed above.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. **ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.** Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pest, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. **IN-NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.**

GENERAL INFORMATION FOR PROFESSIONAL TURF USE

This product is not recommended for application by homeowners.

DIMENSION is a selective herbicide that provides control of crabgrass and other annual grasses and broadleaf weeds in established lawns, commercial sod farms and ornamental turfs, including golf course fairways, roughs, tee boxes and putting greens.

This product will not harm nearby established ornamentals when used according to label directions.

USE PRECAUTIONS

Turfgrass Safety

This product may be used on seeded, sodded, or sprigged lawns and ornamental turfs that are well-established. The grass must have developed a good root system and a uniform stand, and have received at least two mowings following its seeding, sodding, or sprigging before it can receive its first application of this product.

Use of this product on turf that is not well-established, or has been weakened by weather, pest, disease, chemical, mechanical or other related stress, may result in turf injury.

This product should only be applied to turf that is composed of the following turfgrasses species that have been determined to be tolerant to applications of this product.

When applied as directed under the conditions described, the following established turfgrasses are tolerant to this product (see the "Golf Course Putting Greens" precautions section for additional turfgrass safety information):

Cool-Season Grasses

Bentgrass, creeping*	<i>Agrostis palustris</i>	
Bluegrass, Kentucky	<i>Poa pratensis</i>	» » » »
Fescue, Fine**	<i>Festuca rubra</i>	» » » »
Fescue, Tall	<i>Festuca trundinacea</i>	» » » »
Ryegrass, Perennial	<i>Lolium perenne</i>	» » » »

Warm-Season Grasses

Bahiagrass	<i>Paspalum notatum</i>	» » » »
Bermudagrass***	<i>Cynodon dactylon</i>	» » » »
Buffalograss****	<i>Buchloe dactyloides</i>	» » » »
Carpetgrass	<i>Axonopus affinis</i>	» » » »
Centipedegrass	<i>Eremochloa ophiuroides</i>	» » » »
Kikuyugrass	<i>Pennisetum clandestinum</i>	» » » »
Seashore Paspalum	<i>Paspalius vaginatum</i>	» » » »
St. Augustinegrass	<i>Stenotaphrum secundatum</i>	
Zoysiagrass	<i>Zoysia japonica</i>	

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Use of this product is not recommended on certain varieties of creeping bentgrass, such as 'Cohansey', 'Carmen', 'Seaside', and 'Washington', as undesirable turfgrass injury may result. Not all varieties of creeping bentgrass have been tested.

DO NOT apply this product to Colonial bentgrass (*Agrostis tenuis*) varieties.

Use of this product on certain varieties of fine fescue is not recommended as use may result in undesirable turf injury. The following fine fescue varieties have been found to be sensitive to this product: 'Atlanta', 'Banner', 'Beauty', 'Bilgart', 'CE-2', 'Enjoy', 'HF-93', 'Highlight', 'Ivalo', 'Jamestown', 'Kokel', 'Majenta', 'Mary', 'Pennlawn', 'Tamara', 'Tatjana', 'Waldorf', and 'Waldina'. Not all varieties of fine fescue have been tested.

Use of this product on 'Tifgreen' (328) hybrid bermudagrass greens is not recommended as use may result in undesirable turfgrass injury.

**** DO NOT use this product on seedling buffalograss in the spring of the first year of establishment until the turfgrass is fully green and has established new roots.

Reseeding, Overseeding, or Sprigging

Reseeding, overseeding, or sprigging of treated areas within 3 months after a single application of this product, or 4 months after a split application program totaling more than 1.5 fl oz/1000 sq ft (2 qts/a), may inhibit the establishment of desirable turfgrasses. When reseeding or overseeding, proper cultural practices such as soil cultivation, irrigation and fertilization should be followed. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed to soil contact.

Golf Course Putting Greens

Putting greens should be well-drained and managed to promote the development of deep rooting systems. The use of this product on greens without good root development may result in undesirable turfgrass injury.

Application of this product to overseeded greens should be made less than four weeks before the transition period from overseeded turfgrass back to established turfgrass.

Do not apply this product to golf course putting greens that are under stress. High temperatures cause stress to greens increasing the risk of turfgrass injury. Do not use this product if *Poa annua* cover is desirable.

Use of this product on 'Tifgreen' (328) hybrid bermudagrass greens may result in undesirable turfgrass injury.

DO NOT apply this product to Colonial bentgrass greens.

For additional margins of turfgrass safety on greens and where consistent with local use guides, consider the use of split applications (made at rates equal to one-half of the Program 3 single application use rate recommended for your region in Table 1 on this label) spaced 6-8 weeks apart.

DO NOT tank-mix this product with other products (other than marking dyes or foams) for application to greens.

DO NOT use this product on Putting Greens which have been treated within four weeks with a plant growth regulator.

DO NOT apply this product in the fall before covering greens for winter protection.

Properly calibrate application equipment prior to usage, and DO NOT apply this product through equipment that uses cluster spray nozzles (due to variability in application use rates and spray patterns).

Sod Production

Do NOT apply this product until sod is well established. It is recommended that sod be established for at least six (6) months before a DIMENSION herbicide application is made.

Do NOT apply this product within three (3) months of harvest.

Other Use Precautions

Early postemergence applications of this product alone are only effective on crabgrass if applied before crabgrass has displayed its fifth leaf or first tiller.

For best results, cultural practices that disturb the soil, such as core-, spike-, or hydro-aerification, and verticutting, should be done before application of this product.

DO NOT apply this product until the grass has recovered from these cultural practices.

DO NOT use clippings from treated turf for mulching around vegetables or fruit trees.

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APPLICATION DIRECTIONS

APPLICATION EQUIPMENT AND INSTRUCTIONS

Apply this product through conventional liquid application equipment in a sufficient volume of carrier solution to provide a uniform spray distribution. DO NOT apply this product through liquid application equipment that uses cluster spray nozzles or other boomless spray equipment due to variability in application use rates and spray patterns. Calibrate application equipment prior to usage. Avoid streaking, skips, or excess overlaps during application. The use of marker dyes or foams aids in making more accurate applications. DO NOT apply this product through any type of irrigation system.

Dimension Turf and Ornamental Herbicide contains a naphtha solvent. Under unusual circumstances, this solvent may weaken rubber or plastic components of mixing/spraying equipment (e.g., hoses). To reduce the potential for such damage (1) review and heed the equipment manufacturer's instructions for compatibility with naphtha solvents, (2) use typical dilutions (e.g., 1 gal of Dimension in at least 50 gal of total spray solution), and (3) store spray solution in equipment for no more than three days.

CONTROL OF CRABGRASS

PREEMERGENCE AND EARLY POSTEMERGENCE CONTROL.

This product provides "preemergence" control of crabgrass (including the large, smooth, and southern species) when applied prior to the emergence of crabgrass from the ground in established lawns and ornamental turfs.

It can also provide "early postemergence" control of crabgrass during the early stages of crabgrass growth after the crabgrass has emerged from the ground. However, it is often difficult to see the very small, early stages of crabgrass in well-established lawns and ornamental turfs. Early post-emergence crabgrass control will be obtained only when this product is applied prior to the tillering of crabgrass, which generally corresponds to the time when you can first easily see the crabgrass plants in the lawn or turf. So the practical benefit of this product's additional, early postemergence activity is that (compared to strictly preemergence crabgrass products) it can give the user a 2-8 week longer period of time (depending on climatic conditions and crabgrass growth rates) to make applications and still control crabgrass.

APPLICATION FREQUENCY AND TIMING.

This product may be applied as a single application, as a split application, or as a sequential application for crabgrass control in the spring, summer, or fall.

DO NOT apply more than 1.5 fl oz/1000 sq ft (2 qts/a) per application, and no more than 4.5 fl oz/1000 sq ft (6 qts/a) per year if using split or sequential applications.

SPRING APPLICATIONS.

For applications made in the spring or early summer, this product should be applied at the appropriate rate corresponding to one of the three control programs listed in Table 1, depending on the user's location, the mowing height of the turfgrass, and whether the use is considered to be preemergence or early postemergence at the time of the application. The duration of residual weed control provided by this product is directly related to the total rate applied, but will vary somewhat depending on weather, weed pressure, turfgrass competitiveness, and the user's location within a region.

Use Program 1 for preemergence control at sites where turfgrass is cut relatively high (e.g., homeowner lawns). This program provides 3-5 months of preemergence crabgrass control. This program will also provide early postemergence control of crabgrass up to the 3-leaf stage at sites where turfgrass is cut relatively high (e.g., homeowner lawns).

Use Program 2 for preemergence control at sites where (a) turfgrass is cut relatively low (e.g., golf fairways), and (b) turfgrass maintenance or weed control has been conducted during the previous year. This program provides 4-6 months of preemergence crabgrass control. This program may also be used for early postemergence control up to crabgrass tillering at sites where turfgrass is cut relatively high (e.g., homeowner lawns).

Use Program 3 for preemergence control at sites where (a) turfgrass is cut relatively low (e.g., golf fairways) and (b) turf maintenance or weed control has not been conducted during the previous year. This program provides 4-6 months of preemergence crabgrass control. This program may also be used for early postemergence control up to crabgrass tillering at sites where turfgrass is cut relatively low (e.g., golf fairways).

Subsequent, sequential pre- and/or postemergence applications should be made where longer periods of control are desired.

Split applications may also be made, with the rates in Table 1 being split across two applications made 5-10 weeks apart.

Such applications may provide improved weed control.

TANK MIXTURES

READ THE LABEL OF EACH TANK MIXTURE PRODUCT USED AND FOLLOW THE PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, AND OTHER RESTRICTIONS. DO NOT TANK-MIX THIS PRODUCT WITH OTHER PRODUCTS (EXCEPT MARKER DYES AND FOAMS) FOR APPLICATION TO GOLF GREENS.

This product may be tank-mixed with fluid fertilizers and/or MSMA and Acclaim™. When applied according to label directions, a tank mixture of this product and an EPA-registered pesticide will provide control of susceptible pests listed on the respective labels for the two products. A compatibility test (see the "Compatibility Test" section below) is suggested before tank-mixing this product.

TANK MIXTURES FOR POSTEMERGENCE CONTROL OF CRABGRASS

Application of this product alone provides early postemergence control of crabgrass when treated prior to reaching the tillering stage of growth. For postemergence control of tillered crabgrass up to 3 tillers, this product should be applied in combination with either MSMA or Acclaim™.

Use the lower rate if preemergence herbicides have been applied prior to the postemergence application otherwise use the high rate.

Observe all limitations, precautionary statements, and use restrictions on labels for MSMA or Acclaim when using these tank mixtures. Refer to specific turfgrass species for safety information for these products. The addition of a nonionic surfactant may improve control. Always read and follow the surfactant manufacturer's label recommendations.

PHYSICAL COMPATIBILITY TEST

Before mixing this product with fluid fertilizers and/or other pesticides, it is advisable to test compatibility by mixing all the components in a small jar in proportionate quantities.

COMPATIBILITY TEST MIXING INSTRUCTIONS

	IF	Amount of Pesticide added to Spray Carrier (assuming volume is 25 GPA) ADD:	
Pesticide Formulation	Rate per Acre	Level Teaspoons per Pint Jar	of Carrier Solution
Dry	1 lb	1-1/2	
Liquid	1 qt	1	

This compatibility test is designed for 25 gallons of spray solution per acre. The table above gives general guidelines for use rate ratios of pesticides to be tank-mixed with this product. Determine the amount of pesticide to tank-mix by referring to the pesticide label(s). Then, calculate the amount of pesticide to add to jar based on use rate ratios in table. For a use rate of 1 pound per acre of dry pesticide add 1-1/2 teaspoons to the jar, and for a use rate of 1 quart per acre of liquid pesticide, add 1 teaspoon to the jar. This product should be added based on use rate ratios for liquid pesticides (for use rate of 1 quart per acre add 1 teaspoon to the jar). For changes in spray volume or herbicide rate, make appropriate changes in the ingredients for the test. Shake well after mixing.

If pesticide(s) does not form crystals, flakes, sludge, gels, oily films or layers, then the tested components are compatible. Incompatibility in any of the above described forms will usually occur within 5 minutes after mixing. If components are incompatible, the use of a compatibility agent is recommended. Repeat the above compatibility test with a suitable compatibility agent (one-half teaspoon per pint jar is equivalent to 2 pints per 100 gallons of spray solution).

MIXING INSTRUCTIONS

Dimension Alone with Water as the Carrier:

Fill the previously cleaned spray tank to about three-fourths of the desired volume with water. Add the recommended amount of this product to the tank. Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the water source.

Dimension Alone with Fluid Fertilizer as the Carrier:

First, determine the compatibility of this product with the desired fluid fertilizer by mixing small proportional quantities in advance. See the "Compatibility Test" section of this label. Then follow the mixing procedure listed below for tank mixtures.

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USE DIRECTIONS FOR LANDSCAPE ORNAMENTALS

Dimension Turf and Ornamental Herbicide provides preemergence control of listed annual grass and broadleaf weeds in landscape ornamentals. It is intended for use on plants being grown for aesthetic purposes in landscaped areas.

When applied as directed, the ornamental plants listed on this label have shown tolerance to post-directed applications of Dimension herbicide.

It is impossible, however, to evaluate tolerance to this product on all ornamental plant species or varieties or under all possible growing conditions.

Under your growing conditions, a limited area involving only a few plants should be treated for tolerance evaluation prior to large-scale applications.

NOTE: This product is not recommended for use as an over-the-top broadcast spray in landscape ornamentals. Foliage that receive direct or indirect(drift) spray contact may be injured. The injury is typically cosmetic and the plants normally outgrow this condition rapidly and develop normally.

USE RATES:

Apply Dimension Turf and Ornamental Herbicide with a calibrated sprayer which will assure accurate, even, spray distribution. In general, Dimension herbicide should be thoroughly mixed with clean water at 1.0 to 1.5 fluid ounces of product per 1000 square feet per application and applied at 20 to 40 psi in a minimum of one gallon of water per 1000 square feet.

This product may be applied as a single application or as a split application prior to weed seed germination.

Refer to the following table for product recommendations when treating a small area.

DO NOT apply more than 1.5 fl. oz. of product/1000 sq. ft.(2 qts./A) per application and no more than 4.5 fl. oz. of product/1000 sq. ft(6 qts./A) per year if using split or sequential applications..

This product may be applied as a split application or as a sequential application for weed control in the spring, summer or fall.

Quarts Product/Acre	Fluid Ounces DIMENSION/1000 Sq. Ft.	Fluid Ounces DIMENSION /100 Sq. Ft.	Milliliters Product/100 Sq. Ft.
2	1.5	0.15	4.4

APPLICATION TIMING AND RECOMMENDATIONS

Apply Dimension Turf and Ornamental Herbicide as a post-directed spray around established ornamentals. Direct sprays to the soil at the base of the ornamentals avoiding contact or drift to foliage.

Dimension is a preemergence herbicide that will control germinating weeds. It will not control weeds that are established. Make applications prior to weed seed germination or to bare ground. The best weed control is obtained when applications are made to soil that is free of clods, weeds and debris such as leaves. Prior to making an application, control existing vegetation by hand weeding, by cultivation or with a postemergence herbicide. Once an application of this product has been made, do not disturb the soil surface as the herbicide barrier will be broken. Care must be taken that soil or planting mixes have settled firmly following transplanting and that there are no cracks that would allow direct contact of this product and plant roots.

PRECAUTIONS

- Only apply this product to established ornamentals.
- Do not apply this product to bare roots of ornamental plants as injury may result.
- Do not incorporate this product into soil. Dilution of active ingredient and possible injury to plant roots may occur.
- Do not apply around ornamental plants that have been weakened or are under stress (due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, winter injury, injury from previously applied pesticides or injury due to insects, nematodes or diseases).
- Do not make applications when weather conditions favor drift to non-target areas. This product may injure foliage of non-target plants.
- Do not apply this product on grasses grown for seed.
- Do not graze livestock or feed forage cut from areas treated with this product.

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TOLERANT ORNAMENTALS

When applied as directed under the conditions described on this label, ornamentals listed below have shown tolerance in field trials. However, this product has not been tested on all cultivars of each species or under all possible growing conditions. Under your growing conditions, a limited number of plants should be treated for tolerance evaluations, prior to initiating large-scale applications. Follow directions given above to determine plant tolerance under your growing conditions prior to large scale use

COMMON NAME	BOTANICAL NAME	TOLERANT CULTIVARS
Abelia, Dwarf	<i>Abelia X grandiflora</i>	Nana
Ajuga	<i>Ajuga reptans</i> <i>Ajuga genevensis</i>	Bronze Bronze Beauty
Almond, Flowering	<i>Prunus glandulosa</i>	
Apple*	<i>Malus pumila</i>	
Arborvitae	<i>Thuja occidentalis</i>	Nigra Pyramidalis Smaragh Techny Woodwardii
Arborvitae, Golden	<i>Thuja orientalis</i>	
Aster, Chinese	<i>Callistephus chinensis</i>	Dwarf Queen
Ash, Green	<i>Fraxinus pennsylvanica</i>	
Ash, Mountain	<i>Sorbus aucuparia</i>	
Ash, Purple	<i>Fraxinus americana</i>	
Azalea	<i>Rhododendron</i> spp.	Brilliant Buccaneer Carror Chimes (Belgian) Exbury Fashion Hardijzer Beauty Hershey Red Higasa Hinocrimson Holland (Hybrid) Marion Lee Northern Lights Orange Cup Orchid Lights Snow Southern Charm
Azalea, Flame	<i>Rhododendron calendulaceum</i>	
Azalea, Kurshima		
Bamboo, Heavenly		
Barberry	<i>Berberis thunbergii</i>	Aurea Dwarf Pigmy Green Kobold Pygmy Red Rose Glow
Barberry, Purple		Atropurpurea
Bearberry (common)	<i>Arctostaphylos uva-ursi</i>	Massachusetts
Birch, River	<i>Betula nigra</i>	
Blueberry*	<i>Vaccinium</i> spp.	Bluecrop Blue Jay Jersey North Blue Northland
Botanibrush	<i>Callistemon citrinus</i>	
Boxwood, Japanese		Japonica

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Boxwood, Weller	<i>Buxus sempervirens</i>	
Broom	<i>Cytisus spp.</i>	Moonlight
Broom	<i>Genista pilosa</i>	Vancouver Gold
Bugle Carpet		
Camellia	<i>Camellia japonica</i> <i>Camellia sasangua</i>	Debutante Mathotiana Supreme Chansonette
Carex, Variegated	<i>Carex</i>	
Cedar, Red	<i>Juniperus virginiana</i>	
Cockscomb, Plumosa	<i>Celosia cristata</i>	Red Kewpie
Coleus	<i>Coleus blumei</i>	
Copper leaf	<i>Acabypha wilkesiana</i>	
Cotoneaster	<i>Cotonester apiculatus</i>	
Coyotebrush	<i>Baccharis pelularis</i>	
Cycads	<i>Cycads revoluta</i>	
Cypress, Bald	<i>Taxodium distichum</i>	
Cypress, Italian	<i>Cupressus sempervirens</i>	Glauca
Cypress, Japanese False	<i>Chamaecyparis obtusa</i>	Gracilis
Cypress, Leyland	<i>Cupressocyparis leylandii</i>	
Daffodil	<i>Narcissus spp.</i>	King Alfred
Daylily	<i>Hemerocallis spp.</i>	Aztec Gold Bright Yellow (Hybrid) Single Gold (Evergreen) Wilson's Yellow
Dogwood	<i>Cornus florida</i>	
Dogwood, American	<i>Cornus sericea</i>	Flavarimaea
Douglas Fir	<i>Pseudotsuga menziesii</i>	
Dusty Miller	<i>Senecio cineraria</i>	
Elm, Drake	<i>Ulmus parvifolia</i>	
Euonymus	<i>Euonymus fotunei</i>	Argenteo-variegata Auereo-marginata Colorata Emerald Gaiety Emerald 'N Gold Gold Edge Gold Princess Silver King Tricolor Vegetus
Fan Palm, European	<i>Chamaerops humilis</i>	
Fan Palm, Mexican	<i>Washingtonia robusta</i>	
Fescue	<i>Festuca glauca</i>	
Fetterbush	<i>Leucothoe fontiana</i>	Rainbow
Ficus	<i>Ficus retusa</i>	Nitidia
Fir Fraser	<i>Abies fraseri</i>	
Forsythia	<i>Forsythia X intermedia</i> <i>Spring Glory</i>	Arnold Dwarf Bronxensis Dwarf Lynwood Gold Meadowlark Weeping
Gardenia	<i>Gardenia jasminoides</i>	Mystery Radicans
Geranium	<i>Pelargonium X hortorum</i>	
Gum	<i>Eucalyptus citriodora</i>	
Hawthorn	<i>Crataegus spp.</i>	Cockspur White Crimson Cloud Enchantress Jack Evans Washington White

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Heather, Twisted	<i>Erica cinerea</i>	Mediterranean Pink
Hemlock; Canada	<i>Tsuga canadensis</i>	
Hibiscus	<i>Hibiscus spp.</i>	Blue Bird Brilliant Hula Girl
Holly	<i>Ilex spp.</i> <i>Ilex X meserveae</i> <i>Ilex X attenuata</i>	Blue Boy Blue Girl Burfordii China Girl Compacta Forsteri Hellerie Japanese Northern Beauty Needlepoint Nellie R. Stevens Savanah
Holly, Chinese	<i>Ilex cornuta</i>	
Holly, Japanese	<i>Ilex crenata</i>	
Holly, Yaupon	<i>Ilex vomitoria</i>	
Honeysuckle	<i>Lonicera japonica</i>	Clavey's Dwarf Halliana Tatarian Canadian White Zebelli Red Hosta
Hosta	<i>Hosta spp.</i> <i>Hosta lancifolia</i>	Albo Marginata
Ice Plant	<i>Carpobrotus edulis</i>	
Impatiens	<i>Impatiens wallerana</i>	
Iris	<i>Iris spp.</i>	Dwarf Blue Wedgewood
Ivy, English	<i>Hedera helix</i>	Bulgaria Thorndale
Jasmine, Asian	<i>Trachelopermum asiaticum</i>	
Juniper	<i>Juniperus spp.</i>	Arcadia Armstrong Bar Harbor
	<i>Juniperus horizontalis</i>	Blue Chip Blue Pacific Blue Rug
	<i>Juniperus horizontalis</i>	Blue Star Broadmoor Buffalo Calgary Carpet Emerald Sea Emerald Spreader Endora Compacta Fruitlandi Green Gold Tip Hetzi Hughes Manhattan Blue Parsoni Pfitzeriana Plumosa Prince of Wales Procumbens Dwarf San Jose Sargent Blue Sargent Green Scandia Scopulorum Moonglow

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		Scopulorum Skyrocket Spartan
	<i>Juniperus chinensis</i>	Tamariscifolia
	<i>Juniperus sabina</i>	Weberi Youngstown Yukon Belle
King Palm	<i>Archontophoenix cunninghamiana</i>	
Laurel, Australian	<i>Pittosporum tobira</i>	
Laurel, Mountain	<i>Kalmia latifolia</i>	
Leucothoe	<i>Leucothoe fontanesiana</i>	
Ligustrum, Japanese	<i>Ligustrum japonicum</i>	
Lily, Africian	<i>Agapanthus africanus</i>	Albus Peter Pan
Lily, Africian Blue		
Lily of the Valley	<i>Pieris japonica</i>	Mt. Fire
Lilyturf	<i>Liriope muscari</i>	Evergreen Giant Lilac Beauty Majestic Monroe White Variegata
Liriope, Green	<i>Liriope spicata</i>	
Maple, Japanese	<i>Acer japonicum</i>	
Maple, Norway	<i>Acer platanoides</i>	
Maple, Red	<i>Acer rubrum</i>	
Maple, Silver	<i>Acer saccharinum</i>	
Maple Sugar	<i>Acer saccharum</i>	
Marigold	<i>Tagetes patula</i>	Honeycomb Variegata Wheeler's Dwarf
Mock Orange*	<i>Philadelphus spp</i>	Golden Snowflake Double White
Mopndo Grass	<i>Ophiopogon japonicus</i>	
Moss Rose	<i>Portulaca grandiflora</i>	Sunnyside
Myrtle, Crape	<i>Lagerstoemia indica</i>	Faurei Langer Muskogee Standard Pink
Myrtle, Wax	<i>Myrica cerifer</i>	
Nadina	<i>Nadina domestica</i>	Compacta Nana
Oak, Laurel	<i>Quercus laurifolia</i>	
Oak, Pin	<i>Quercus palustris</i>	
Oak, Red	<i>Quercus rubra</i>	
Oak, Southern L.	<i>Quercus virginiana</i>	
Oak, Willow	<i>Quercus phellos</i>	
Oleander	<i>Nerium oleander</i>	Hardy Red Petite Pink Sister Agnes
Oteospermum	<i>Osteospermum fruticosum</i>	Wirfigig
Pachysandra	<i>Pachysandra terminalis</i>	
Palm, Bangalow		
Pampas Grass	<i>Cortadaria selloana</i>	
Paper Flower	<i>Bougainvillea glabra</i>	Barbara Karst
Peach*	<i>Prunus persica</i>	
Periwinkle, Dwarf	<i>Vinca minor</i>	
Petunia	<i>Petunia X hybrida</i>	Picoti
Photinia, Red Tip	<i>Photinia X fraseri</i>	

Pieris	<i>Pieris japonica</i>	
Pine, Australian	<i>Pinus nigra</i>	
Pine, Japanese Black	<i>Pinus thumbergiana</i>	
Pine, Loblolly	<i>Pinus taeda</i>	
Pine, Longleaf	<i>Pinus palustris</i>	
Pine, Mugho	<i>Pinus mugho</i>	
Pine, Scotch	<i>Pinus sylvestris</i>	
Pine, Slash	<i>Pinus elliottii</i>	
Pine, Swiss Mt.	<i>Pinus mugo</i>	
Pine, Virginia	<i>Pinus virginiana</i>	
Pine, White	<i>Pinus strobus</i>	
Pineapple, Guava	<i>Feijoa fellowaiana</i>	
Pittosporum, Japan.		
Potentilla	<i>Potentilla fruticosa</i>	Abbotswood
Privet	<i>Ligustrum japonicum</i>	Golden Vicary Regal Texanum Wax Yellow Tipped
Privet, Glossy	<i>Ligustrum lucidum</i>	
Pyracantha	<i>Pyracantha koidzumii</i>	Gnome Lalandei Victory
Queen Palm	<i>Arecastrum rammanzoffianum</i>	
Quince, Japanese*		
Rhododendron	<i>Rhododendron spp</i>	Album Cunningham White Fashion Hardy PJM Purple Gem Silvery Pink
Rhododendron, Carolina	<i>Rhododendron carolinianum</i>	
Rhododendron, Catawba	<i>Rhododendron catawbiense</i>	
Rodie Max (Rosebay)	<i>Rhododendron maximum</i>	
Rose	<i>Rosa banksiaae</i>	Luta
Rosemary*	<i>Rosmarinus officinalis</i>	
Rosemary, Bog	<i>Andromeda polifolia</i>	Nana
Salvia	<i>Salvia farinacea</i>	Rhea
Sedum	<i>Sedum spurium</i>	Dragon Blood Red Red Carpet Yellow
Sourwood	<i>Oxydendrum arboreum</i>	
Spiraea	<i>Astilbe X arendsii</i>	Fanall
Spiraea	<i>Spiraea spp.</i>	Anthony Waterer Red Dolchica Froebeli Pink Goldenflame Red Snowmound White Van Houtte White
Spiraea, Garland	<i>Spiraea spp.</i>	
Spruce, Black Hills	<i>Picea glauca</i>	
Spruce, Colorado Blue	<i>Picea pungens</i>	
Spruce, Norway	<i>Picea abies</i>	
Spruce, White	<i>Picea glauca</i>	Conica
Sweetflag, Grassyy-Le		
Sweetgum	<i>Liquidambar styraciflua</i>	
Sycamore	<i>Platanus occidentalis</i>	
Tree Fern (Tiki Fern)	<i>Asparagus virgatus</i>	

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Trumpet Flower, Evening	<i>Gelsemium sempervirens</i>	
Tulip	<i>Tulip. spp</i>	Apeldoorn
Verbena, Shrub	<i>Lantana sellowiana</i>	
Vervain	<i>Verbena spp.</i>	St. Paul
Viburnum	<i>Viburnum spp.</i>	American Cranberry Bush Arrowood Common Snowball European Cranberry Bush Linden Mohican Wright
Windmill Palm	<i>Trachycarpus fortunei</i>	
Xylosma	<i>Xylosma congestum</i>	
Yaupon	<i>Ilex vomitoria</i>	Dwarf
Yew	<i>Taxus cuspidata</i> <i>Taxus X media</i>	Denisiformis

*Ornamental species only. DO NOT USE ON FOOD PRODUCING TREES AND PLANTS.

DIMENSION IS A REGISTERED TRADEMARK OF ROHM AND HAAS COMPANY
ACCLAIM IS A REGISTERED TRADEMARK OF AGR/EVO COMPANY

GENERAL INFORMATION FOR HOME OWNER USE ON RESIDENTIAL TURF AND ORNAMENTAL BEDS

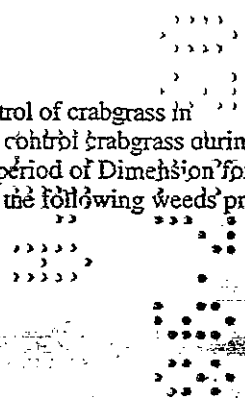
Dimension is a selective herbicide that provides preemergence and postemergence control of crabgrass. Preemergence control of other annual grasses and broadleaf weeds in established lawns, landscape ornamentals and flower beds is also achieved. Dimension Turf and Ornamental Herbicide will not control already established weeds other than crabgrass. Dimension should be used in conjunction with good lawn and landscape management practices including proper fertility, mowing and watering. Such programs include applying nitrogen containing fertilizers, maintaining turf at a mowing height of two inches or higher and irrigating turf and landscape plants to relieve drought stress.

APPLICATION INSTRUCTIONS

SPRING APPLICATIONS

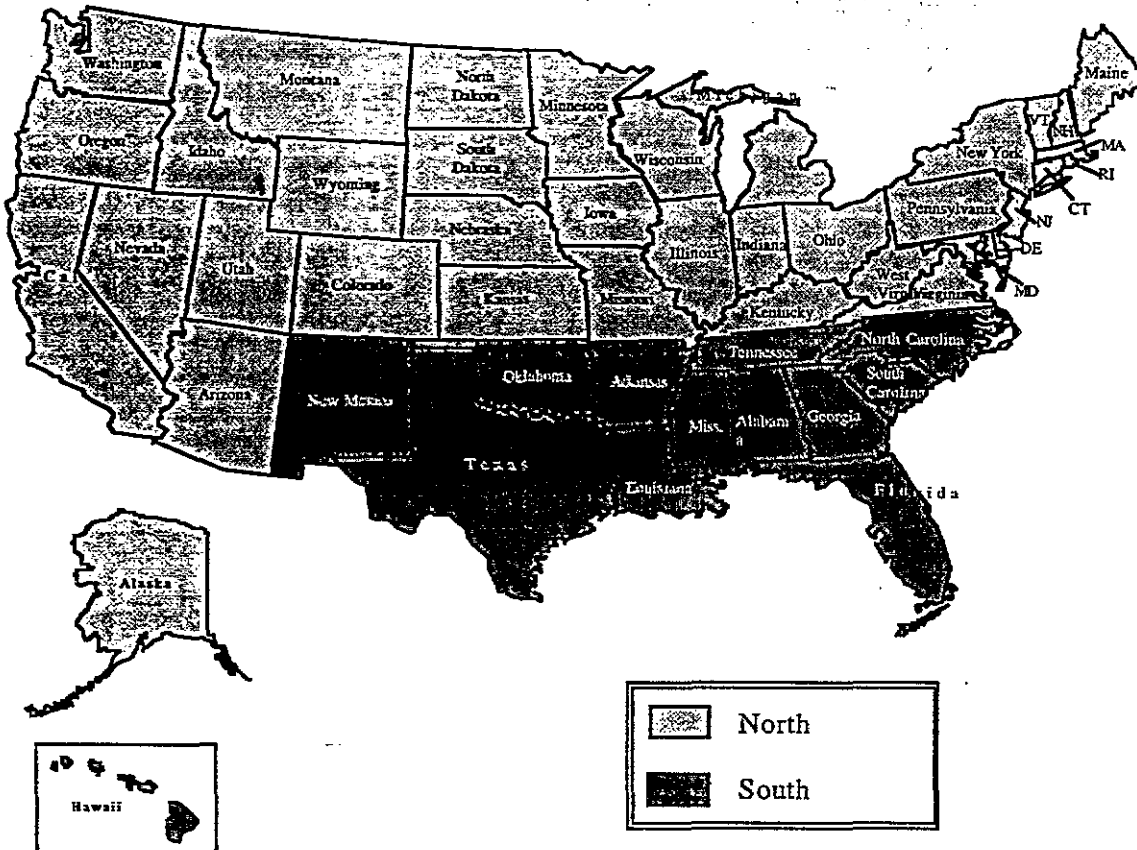
Dimension Turf and Ornamental Herbicide provides "preemergence" and early postemergence control of crabgrass in established lawns and ornamental plantings. The "early postemergence" control of crabgrass will control crabgrass during the initial stages of growth up to the three leaf stage. This activity extends the effective application period of Dimension for crabgrass control as much as 2-8 weeks. Used as directed in the spring, Dimension also controls the following weeds prior to their emergence:

- barnyardgrass
- bluegrass (annual)
- crowfootgrass
- foxtail (yellow and green)
- goosegrass
- ryegrass (annual and perennial)
- smutgrass



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TABLE 1
APPLICATION RATES
FOR DIMENSION TURF AND ORNAMENTAL HERBICIDE IN DIFFERENT STATES



REGION	STATES	HOSE-END SPRAYER	PUMP-UP SPRAYER
		FLUID OUNCE/GALLON/ 1000 SQ. FT.	FLUID OUNCE/1000 SQ. FT.
NORTH	AZ, CA, CN, CO, CT, DE, ID, IL, IO, IN, KS, KY, MA, ME, MD, MI, MO, NC, NE, NH, NJ, NY, NV, OH, OR, PA, RI, VA, VT, WA.	0.18 - 0.375 (1 - 2.25 TEASPOONS)	0.75 - 1.5 (4.5 - 9.0 TEASPOONS)
SOUTH	AL, AR, FL, GA, HI, LA, MS, NC, NM, OK, SC, TN, TX.	0.25 - 0.375 (1.5 - 2.25 TEASPOONS)	1.0 - 1.5 (6 - 9.0 TEASPOONS)

DO NOT apply more than 1.5 fl. oz. /1000 sq. ft. per application and no more than 4.5 fl. oz./1900 sq. ft.
 UNIFORMLY APPLY A MINIMUM OF 4 GALLONS WATER PER 1000 SQ. FT.

