

10/13/92

Mr. Victor A. Dorr
Hoechst Celanese Corporation
Route 202-205, P.O. Box 2500
Somerville, NJ 08876-1258

Dear Mr. Dorr:

Subject: Acclaim[®] IEC Herbicide
EPA Registration No. 8340-18
Application Dated October 26, 1992 Request To Amend
Registration, Minor Technical Revisions to the Use
Directions

The proposed amendments reflected in the labeling submitted with the application have been reviewed and are acceptable for registration under Section 3 of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended provided that you:

• submit five (5) printed copies of the final printed labeling before releasing the product for shipment.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA, Section 6(e). Your release for shipment of the product constitutes acceptance of this condition.

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

Sincerely yours,

Joanne I. Miller
~~Acting~~ Product Manager (25)
Fungicide-Herbicide Branch
Registration Division (H-7505C)

Enclosure

E.Wilson: Diskette 0009: 10-13-92

BEST AVAILABLE COPY

NAC 1700000 11-13-92
11-13-92
Virginia Wilson

[Container Label - 3 Pages]

Revised October 21, 1992

ACCLAIM® 1EC HERBICIDE

FOR SELECTIVE POSTEMERGENCE ANNUAL AND PERENNIAL GRASS
CONTROL IN TURFGRASS INCLUDING SOD FARMS, COMMERCIAL AND
RESIDENTIAL TURF, ORNAMENTALS, AND RIGHTS-OF-WAY

ACTIVE INGREDIENT:

fenoxaprop-ethyl: (±)-ethyl 2-[4-[(6-chloro-2-
benzoxazolyl)oxy] phenoxy]propanoate 12.50%*

INERT INGREDIENTS: 87.50%**
TOTAL 100.00%

* Equivalent to 1.00 pound of active ingredient per gallon.

** This product contains the toxic inert ingredient
dimethylformamide.

KEEP OUT OF REACH OF CHILDREN

WARNING

SEE ADDITIONAL PRECAUTIONARY STATEMENTS AT BEGINNING OF LABEL.

Not for use in California and Hawaii

EPA REG. NO. 8340-18

ACCEPTED
with COMMENTS
in 11/13/92

EPA EST. NO. 34704-MS-1

NET CONTENTS:

Nov. 16, 1992
8340-18

HOECHST CELANESE CORPORATION
Route 202-206
P.O. Box 2500
Somerville, NJ 08876-1258

Hoechst 

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PRECAUTIONARY STATEMENTS

WARNING

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

May cause substantial but temporary eye injury. Do not get in eyes. Wear goggles or face shield and impermeable rubber gloves (such as neoprene or PVC) while mixing. Harmful if swallowed, absorbed through skin or inhaled. Do not take internally. Avoid inhalation of vapor or spray mist. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean equipment or dispose of equipment washwaters in a manner that will contaminate water resources or arable land.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Do not store over 100°F or below 10°F. Do not use or store near heat or open flame.

PESTICIDE DISPOSAL:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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:

Empty containers should be triple rinsed into the spray tank during the spray operation. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerator, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

BEST AVAILABLE COPY

STATEMENT OF PRACTICAL TREATMENT

In case of eye contact, immediately flush with plenty of water for 15 minutes. Get medical attention.

If swallowed, do not induce vomiting. Acclaim 1EC Herbicide contains petroleum distillates. Call a physician. Vomiting should be supervised by a physician because of the possible pulmonary damage via aspiration of the solvent.

If possible bring this container and labeling to the attending physician. For emergency assistance call (908) 231-4125.

IMPORTANT NOTICE: DISCLAIMER

Read "IMPORTANT NOTICE: DISCLAIMER" before buying or using. If terms are not acceptable, return at once unopened.

The directions for use of this product are believed to be reliable and should be followed carefully. However, 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 timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

HOECHST CELANESE CORPORATION warrants only that the product conforms to the chemical description on the label and is reasonably fit for the purpose stated on the label when used in accordance with the directions under normal conditions of use. 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 HOECHST CELANESE CORPORATION and user assumes the risk of any such use. HOECHST CELANESE CORPORATION MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY. In no case shall HOECHST CELANESE CORPORATION be liable for consequential, special, indirect or incidental damages resulting from the use or handling of this product. The foregoing conditions of sale and warranty can be varied only by an agreement in writing signed by a duly authorized representative of HOECHST CELANESE CORPORATION.

[Attached Use Directions - 22 Pages]

ACCLAIM® 1EC HERBICIDE

IMPORTANT INSTRUCTIONS ENCLOSED

**FOR SELECTIVE POSTEMERGENCE ANNUAL AND PERENNIAL GRASS
CONTROL IN TURFGRASS INCLUDING SOD FARMS, COMMERCIAL AND
RESIDENTIAL TURF, ORNAMENTALS, AND RIGHTS-OF-WAY**

GENERAL INFORMATION

Acclaim 1EC Herbicide is an emulsifiable concentrate (EC) formulation containing one pound of active ingredient per gallon. Acclaim 1EC Herbicide is used for postemergence control of annual and perennial grassy weeds in established turfgrass and ornamental species. Acclaim 1EC Herbicide does not control broadleaf weeds or sedges.

Acclaim 1EC Herbicide is absorbed through the foliage. Thorough coverage is important. Visual injury on the grassy weed is evident approximately 4-10 days after application (dependent upon environmental conditions) but control of the grassy weeds will take 12-21 days. Visible effects begin as a general chlorosis (yellowing) and/or reddening of the leaf surface followed by death of the weed.

DIRECTIONS FOR USE

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

DIRECTIONS FOR USE IN TURFGRASS SPECIES

Acclaim 1EC Herbicide can be applied as a broadcast application to all cultivars of the following turfgrass species:

<u>Common Name</u>	<u>Scientific Name</u>
Kentucky Bluegrass	(<u>Poa pratensis</u>)
Perennial Ryegrass	(<u>Lolium perenne</u>)
Fine Fescue	(<u>Festuca rubra</u>)
Tall Fescue	(<u>Festuca arundinaceae</u>)
Annual Bluegrass	(<u>Poa annua</u>)
Zoysiagrass	(<u>Zoysia</u> spp.)
Bentgrass *	(<u>Agrostis palustris</u>)

* Follow special Directions for Use on Bentgrass Turf.

WEED SPECIES CONTROLLED

Acclaim 1EC Herbicide will control the following annual grassy weeds:

<u>Common Name</u>	<u>Scientific Name</u>
Smooth Crabgrass	(<u>Digitaria ischaemum</u>)
Hairy Crabgrass	(<u>Digitaria sanguinalis</u>)
Goosegrass, Silver Crabgrass	(<u>Eleusine indica</u>)
Barnyardgrass	(<u>Echinochloa crus-galli</u>)
Foxtail Species	(<u>Setaria spp.</u>)
Panicum Species	(<u>Panicum spp.</u>)
Johnsongrass (seedling)	(<u>Sorghum halepense</u>)
Sandbur	(<u>Cenchrus incertus</u>)
Sprangletop	(<u>Leptochloa spp.</u>)

WEED SPECIES SUPPRESSED

Acclaim will temporarily suppress the growth of the following perennial grassy weeds:

<u>Common Name</u>	<u>Scientific Name</u>
Common Bermudagrass	(<u>Cynodon dactylon</u>)
Johnsongrass (rhizome)	(<u>Sorghum halepense</u>)

Acclaim 1EC Herbicide will suppress the growth of common Bermudagrass and rhizome Johnsongrass. Apply Acclaim at 23 ounces/acre (0.53 ounces/1000 sq.ft.) as soon as common Bermudagrass or rhizome Johnsongrass begins growth. Repeat applications of Acclaim every 28-35 days to continue growth suppression of these species. Do not apply more than a total of 138 ounces per acre (3.16 ounces/1000 sq.ft.) per growing season.

APPLICATION INFORMATION

Acclaim 1EC Herbicide is a systemic herbicide which only controls grasses which are emerged at the time of spraying. Young actively growing grassy weeds are more easily controlled than larger grassy weeds. Spray when the maximum leaf surface area is present for optimum activity. Refer to the following application rate and timing recommendation chart for application rates and timing of application. Avoid applications to turfgrass under stress due to lack of moisture, chemical injury or temperature extremes.

**ACCLAIM 1EC HERBICIDE APPLICATION RATE
AND TIMING RECOMMENDATION CHART**

Annual Grassy Weed Growth Stage	Fluid Oz/ Acre	Fluid Oz/ 1,000 sq.ft.
1 leaf to 2 leaf*	4	0.09
Untillered **	10	0.23
Untillered	15	0.34
1 tiller to 2 tiller	23	0.53
3 tiller or greater Kentucky Bluegrass, Zoysiagrass	32	0.73
Tall Fescue, Fine Fescue, Perennial Ryegrass, Annual Bluegrass	45	1.02

*Apply this rate for use in multiple applications on Bentgrass turf.

**Apply this rate only when tank mixing with pre-emergence herbicides.

Pressurized Hydraulic Sprayer Application

Apply Acclaim 1EC Herbicide by means of a pressurized hydraulic sprayer using 30-60 PSI and 30-60 gallons of water per acre (0.7 to 1.4 gallons of finished spray per 1,000 sq.ft.). **Thorough spray coverage is essential for optimum results.** Flat fan nozzles are recommended.

High Volume Handgun Spray Application

If a low pressure (<30 psi), high volume (>60 gpa) handgun type sprayer is utilized, the addition of a surfactant at 32 ounces per 100 gallons is recommended. **Thorough coverage is essential for optimum results.**

Hand-Held Sprayer Application for Spot Treatments

For hand-held pump-type sprayers, add 0.34 - 0.53 fluid ounces of Acclaim 1EC Herbicide per gallon of water. Apply 0.34 fluid ounces per gallon of water when the grassy weed is in the 1-4 leaf stage of growth. Apply 0.53 fluid ounces per gallon of water when the grassy weed has 1-2 tillers. Spray target weeds thoroughly to the point of spray deposit runoff. **Optimum results occur when spray coverage is thorough.** The addition of a surfactant will improve coverage. A dye or colorant may be added to avoid spray pattern overlap.

Mowing Information

Do not mow treated areas for at least 24 hours to allow time for penetration and translocation into the grassy weeds. The effectiveness of Acclaim 1EC Herbicide is reduced when grass clippings interfere with thorough spray coverage of the target weeds.

Repeat Application Information

Repeat applications of Acclaim 1EC Herbicide may be required under the following conditions (refer to application rate and timing recommendation chart for dosages):

- (a) Continued grassy weed seed germination after the initial application.
- (b) When dense populations of weeds prevent thorough spray coverage of the entire leaf surface of target weeds.
- (c) For suppression of common Bermudagrass and rhizome Johnsongrass.

Do not apply more than a total of 138 ounces per acre (3.16 ounces/1000 sq.ft.) per growing season. Avoid applying repeat applications of Acclaim 1EC Herbicide sooner than 14 days after the previous application. Repeat Acclaim 1EC Herbicide applications should only be made to grassy weeds with vigorous growth. If turfgrass stunting occurred with the previous application, avoid applying until turfgrass recovery is complete (unless temporary stunting can be tolerated).

DIRECTIONS FOR USE OF ACCLAIM 1EC HERBICIDE IN TANK MIXES**A. Pre-emergence Residual Herbicides**

A tank mix application of Acclaim 1EC Herbicide and residual herbicides may be made to provide residual annual grass control. Apply after grassy weed germination. Always follow the use directions in accordance with the respective labels. No label dosage rates should be exceeded.

Apply Acclaim 1EC Herbicide at rates of **10 - 32 ounces/Acre or 0.23 - 0.73 ounces/1000 sq.ft.** according to the application rate and timing recommendation chart when tank mixing with the following products:

	<u>Product/Acre</u>	<u>Ounces/1000 ft.²</u>
Barricade 65DG	0.5 - 1.5 pounds	0.18 - .54 ounces
benefin DF	3.3 - 5.0 pounds	1.35 - 1.85 ounces
bensulide 4E	1.88 - 3.1 gallons	5.6 - 9.4 ounces
Dacthal ¹ W75	6 - 20 pounds	2.2 - 7.0 ounces
Dimension ¹⁴	1.5 - 2.0 quarts	1.1 - 1.46 ounces
pendamethalin 60DG	2.5 - 5.0 pounds	0.9 - 1.8 ounces
Tupersan ³ 50W	16 - 24 pounds	6 - 9 ounces
Crab-Spray ¹¹ 10%	15 - 30 pounds	5.5 - 11.0 ounces

B. Postemergence Broadleaf Herbicides

A tank mix application of Acclaim 1EC Herbicide and broadleaf herbicides may be made to provide broadleaf weed and annual grassy weed control. Apply after grassy weed germination. Always follow the use directions in accordance with the respective labels. No label dosage rates should be exceeded.

Apply Acclaim 1EC Herbicide at rates of **10 - 45 ounces/Acre or 0.23 - 1.02 ounces/1000 sq.ft.** according to the application rate and timing recommendation chart when tank mixing with the following products. Apply the 10 ounce rate only when tank mixing with pre-emergence products.

	<u>Product/Acre</u>	<u>Ounces/1000 ft.²</u>
dicamba 4E	0.25-0.50 pint	0.09-0.19 ounces
Confront ⁴	1-2 pints	0.37-0.73 ounces
Turflon ⁴ Amine 3EC	1-4 pints	0.37-1.50 ounces
Tuflon ⁴ Ester 4EC	1-2 pints	0.37-0.73 ounces

Always apply the following tank mixes of Acclaim 1EC Herbicide with pendimethalin at 2.5 pounds/Acre or 0.9 ounces/1000 sq.ft. **Apply before grassy weed tillering** at a rate of **32 ounces/Acre or 0.73 ounces/1000 sq. ft.** when mixing with the following products. Apply by means of a pressurized hydraulic sprayer using 30 -60 psi and 30 -60 gpa. Thorough spray coverage is important. Flat fan nozzles are required.

	<u>Product/Acre</u>	<u>Ounces/1000 ft.²</u>
Lesco Three Way	3.3-4.0 pints	1.2-1.5 ounces
Super Trimec ^o	2-3 pints	0.75-1.10 ounces
Trimec ^o Turf Ester	2-3 pints	0.75-1.10 ounces
Trimec ^o 992	2-3 pints	0.75-1.10 ounces
Turflon ⁱ D	1-2 quarts	0.73-1.50 ounces
Turflon ⁱ II Amine	1-2 quarts	0.73-1.50 ounces
2,4-D amine 4	1.5-2.0 pints	0.60-0.73 ounces

C. Insecticides

Acclaim 1EC Herbicide may be tank mixed with the following insecticides only by or under the direct supervision of certified commercial applicators responsible for pest control programs as specified on the specific insecticide label. Apply after grassy weed germination. Always follow the use directions in accordance with the respective labels. No label dosage rates should be exceeded.

Apply Acclaim 1EC Herbicide at rates of **15 - 45 ounces/Acre or 0.34 - 1.02 ounces/1000 sq.ft.** according to the application rate and timing recommendation chart when tank mixing with the following products:

	<u>Product/Acre</u>	<u>Ounces/1000 ft.²</u>
Diazinon 4EC		2-6 ounces
Dursban ⁱ 4E	1-4 quarts	0.75-3.00 ounces
Dursban ⁱ 50W	2-8 pounds	0.75-3.00 ounces
Oftanol ⁱ 2	2-4 quarts	1.5-3.0 ounces
Triumph		0.75-1.5 ounces
Turcam		1-2 ounces

D. Fungicides

A tank mix application of Acclaim 1EC Herbicide and fungicides may be made to provide disease and annual grass control. Apply after grassy weed germination. Always follow the use directions in accordance with the respective labels. No label dosage rates should be exceeded.

Apply Acclaim 1EC Herbicide at rates of 15- 45 ounces/Acre or 0.34 - 1.02 ounces/1000 sq.ft. according to the application rate and timing recommendation chart when tank mixing with the following products:

	<u>Product/Acre</u>	<u>Ounces/1000 ft.²</u>
Banner ⁸		1.00-4.00 ounces
Banol ^{6,7} F		1.30-4.00 ounces
Bayleton ²⁵		1.00-2.00 ounces
Chipco ¹⁰ 26019		1.00-2.00 ounces
Chipco ¹⁰ 26019 FLO		3.00-4.00 ounces
Daconil ¹ 2787 F	4-24 pints	3.00-11.00 ounces
Daconil ¹ 2787 W75	2.75-16 pounds	2.00-8.00 ounces
Dyrene ¹² 4		4.00-8.00 ounces
Lesco Twosome ²		3.00-8.80 ounces
Mancozeb ⁴ 80 WP		4.00-8.00 ounces
Rubigan ⁴ AS		0.75-2.00 ounces
Rubigan ⁴ WP		0.20-4.00 ounces
Subdue ⁸ 2 E		1.00-2.00 ounces
Teremec ⁶ SP		4.00-8.00 ounces
Tersan ³ 1991		1.00-2.00 ounces

E. Liquid Fertilizers

Acclaim 1EC Herbicide may be tank mixed with liquid nitrogen fertilizers (up to one pound/1000 sq.ft.) and iron chelates.

NOTES FOR WEED CONTROL IN TURFGRASSES

1. Stunting and/or chlorosis may occur on succulent, rapidly growing Kentucky Bluegrass. Symptoms are temporary and will subside.
2. Adequate soil moisture will enhance the performance of Acclaim 1EC Herbicide. Avoid application of Acclaim 1EC Herbicide under **DROUGHT STRESS** conditions. Thorough irrigation one to two days before or within one day after application will be helpful under these conditions. Rainfall or irrigation within one hour of application may cause a reduction in grass control. Allow spray deposit to dry before irrigation.

3. Acclaim 1EC Herbicide may be applied at no more than 10 fl.oz./A on Kentucky bluegrass seedlings that have tillered and have been emerged for over one month. Temporary discoloration and stunting of bluegrass seedlings may occur at this timing. Seedlings will recover, however; and the final bluegrass stand will be improved due to reduced competition from the annual grassy weeds. Annual grassy weeds must be untilled at the time of application for adequate control. Do not reapply Acclaim 1EC Herbicide to previously treated seedling Kentucky bluegrass for at least two months. When utilizing Acclaim 1EC Herbicide at rates higher than 10 fl.oz./A, Kentucky bluegrass seedlings must be at least three growing months old. DO NOT apply Acclaim 1EC Herbicide to seedling fine-leaf fescue, tall fescue, or perennial ryegrass less than 4 weeks old.
4. Broadleaf herbicides such as 2,4-D or MCP may reduce the effectiveness of Acclaim 1EC Herbicide. Tank mixes with 2,4-D or MCP containing herbicides are most effective on untilled crabgrass. Do not apply Acclaim 1EC Herbicide within 21 days following a 2,4-D or MCP application, or 5 days before a 2,4-D or MCP application.
5. Acclaim 1EC Herbicide is a selective grassy weed herbicide and has little or no activity on broadleaf plants and sedges.
6. Acclaim 1EC Herbicide may be applied to newly plugged zoysiagrass. Fescues and ryegrass may be overseeded immediately following Acclaim 1EC Herbicide applications. All other turf species should be overseeded after a 21-day waiting period.
7. Do NOT APPLY this product through any type of irrigation system.
8. DO NOT APPLY Acclaim 1EC Herbicide to sod within 4 weeks before cutting for transplanting or within 4 weeks after transplanting.

DIRECTIONS FOR USE ON BENTGRASS TURF

Acclaim 1EC Herbicide may be applied only to the following established bentgrass varieties maintained at a minimum cutting height of at least 1/4": Penncross, Penneagle, Pennlinks, J.H. Bent, Southshore, SR 1020, Providence, Putter, Kingstown, Tracenta, Bardot, Egmont, Allure, Seaside, and Colonial. The turf should be established for at least one growing season before Acclaim 1EC Herbicide is applied. DO NOT apply to bentgrass putting greens.

To control crabgrass and goosegrass in bentgrass turf, apply 3.09 fluid ounces/1000 sq. ft. (4 fl.oz./A). The Acclaim 1EC Herbicide applications should be made at a minimum of 21-day intervals beginning in the spring when annual grassy weeds first emerge and

are not larger than 2 leaf. Repeat applications throughout the summer as new infestations of 1-2 leaf annual grassy weeds occur. DO NOT apply more than 10 applications per growing season. Delay repeat applications to bentgrass turf under stress conditions. Injury may occur when applied during or immediately following periods of prolonged cool and/or moist conditions. Tank mixing with micronutrient mixes containing nitrogen and iron or slow release nitrogen products may alleviate injury symptoms to bentgrass turf. Spray volumes of 100 gallons per acre (2.29 gallons/1000 sq. ft.) are suggested for improved bentgrass turf tolerance. DO NOT tank mix Acclaim 1EC Herbicide with other pesticides or fertilizers on bentgrass turf except those fungicides listed on this label. The use of a colorant or dye in the spray tank is recommended so that spray pattern overlapping can be avoided.

DIRECTIONS FOR USE IN ORNAMENTALS

Acclaim 1EC Herbicide can be applied for control of grassy weeds in a wide range of established ornamental species. Plant tolerance may vary according to environmental conditions. Determine tolerance prior to extensive use.

Acclaim may be applied as a broadcast spray in the following plantings:

DECIDUOUS AND EVERGREEN TREES AND SHRUBS

<u>Common Name</u>	<u>Scientific Name</u>
Azalea	(<u>Rhododenron</u>)
Barberry	(<u>Berbis</u>)
Boxwood, Korean	(<u>Buxus</u>)
Cotoneaster	(<u>Cotoneaster</u>)
Dogwood, flowering	(<u>Cornus</u>)
English Ivy	(<u>Hedera</u>)
Euonymus	(<u>Euonymus</u>)
False Cypress	(<u>Chamaecyparis</u>)
Firethorn	(<u>Pyracantha</u>)
Forsythia	(<u>Forsythia</u>)
Hawthorn	(<u>Crataegus</u>)
Holly, American	(<u>Ilex</u>)
Holly, Japanese	(<u>Ilex</u>)
Holly, meservae	(<u>Ilex</u>)
Hydrangea	(<u>Hydrangea</u>)
Juniper, Blue Rug	(<u>Juniperus</u>)
Juniper, Dwarf Shore	(<u>Juniperus</u>)
Juniper, Parsonii	(<u>Juniperus</u>)
Juniper, San Jose	(<u>Juniperus</u>)
Juniper, Wiltoni	(<u>Juniperus</u>)
Magnolia	(<u>Magnolia</u>)
Maple, Japanese	(<u>Acer</u>)
Maple, Red	(<u>Acer</u>)
Nandina	(<u>Nandina</u>)
Oleander	(<u>Nerium</u>)
Periwinkle	(<u>Vinca</u>)
Photinia	(<u>Photinia</u>)
Pine, White	(<u>Pinus</u>)
Privet	(<u>Ligustrum</u>)
Rhododendron	(<u>Rhododendron</u>)
Rose	(<u>Rosa</u>)
Virburnum	(<u>Virburnum</u>)
Weigela	(<u>Weigela</u>)
Willow	(<u>Salix</u>)
Yew	(<u>Taxus</u>)

HERBACEOUS & FLOWERING PLANTS

<u>Common Name</u>	<u>Scientific Name</u>
African Daisy	(<u>Osteospermum</u>)
Ajuga	(<u>Ajuga</u>)
Astilbe	(<u>Astilbe</u>)
Baby Blue Eyes	(<u>Nemophila</u>)
Baby's Breath	(<u>Gypsophila</u>)
Begonia	(<u>Begonia</u>)
Bellflower	(<u>Campanula</u>)
Black-Eyed Susan	(<u>Rudbeckia</u>)
Bleeding Heart	(<u>Dicentra</u>)
Blue Bells	(<u>Mertensia</u>)
Blue Flax	(<u>Lobelia</u>)
California Poppy	(<u>Eschscholzia</u>)
Candytuft	(<u>Iberis</u>)
Catchfly	(<u>Silene</u>)
Chrysanthemum	(<u>Chrysanthemum</u>)
Coleus	(<u>Coleus</u>)
Columbine	(<u>Aquilegia</u>)
Coneflower, Purple	(<u>Echinacea</u>)
Coreopsis	(<u>Coreopsis</u>)
Corn Poppy	(<u>Papaver</u>)
Cosmos	(<u>Cosmos</u>)
Creeping Zinnia	(<u>Sanvitalia</u>)
Daisy, Shasta	(<u>Chrysanthemum</u>)
Dames Rocket	(<u>Hesperis</u>)
Dwarf Columbine	(<u>Aquilegia</u>)
Dwarf Cornflower	(<u>Centaurea</u>)
English Wallflower	(<u>Erysimum</u>)
Forget-Me-Not	(<u>Myosotis</u>)
Forget-Me-Not	(<u>Anchusa</u>)
Gaillardia	(<u>Gaillardia</u>)
Garland Chrysanthemum	(<u>Chrysanthemum</u>)
Gazania	(<u>Gazania</u>)
Geranium	(<u>Pelargonium</u>)
Gilia	(<u>Gilia</u>)
Hosta	(<u>Hosta</u>)
Iris	(<u>Iris</u>)
Leopards-Bane	(<u>Doronicum</u>)
Liatris	(<u>Liatris</u>)
Lily, day	(<u>Hemerocallis</u>)
Liriope	(<u>Liriope</u>)
Maiden Pinks	(<u>Dianthus</u>)
Missouri Primrose	(<u>Oenothera</u>)
Mountain Phlox	(<u>Phlox</u>)
Peony	(<u>Peony</u>)
Periwinkle, annual	(<u>Vinca</u>)

HERBACEOUS & FLOWERING PLANTS (continued)

<u>Common Name</u>	<u>Scientific Name</u>
Petunia	<u>(Petunia)</u>
Pimpernel	<u>(Anagallis)</u>
Prairie Coneflower	<u>(Ratibida)</u>
Red Yarrow	<u>(Achillea)</u>
Rocket Larkspur	<u>(Delphinium)</u>
Rocky Mt. Penstemon	<u>(Penstemon)</u>
Roman Chamomile	<u>(Matricaria)</u>
Scarlet Flax	<u>(Linum)</u>
Siberian Wallflower	<u>(Erysimum)</u>
Small Burnet	<u>(Sanguisorba)</u>
Snapdragon	<u>(Antirrhinum)</u>
Snow-in-Summer	<u>(Cerastium)</u>
Soapwort	<u>(Saponaria)</u>
Spurred Snapdragon	<u>(Antirrhinum)</u>
Starflower	<u>(Trientalis)</u>
Statice, Annual	<u>(Statice)</u>
Sweet Alyssum	<u>(Lobularia)</u>
Sweet William	<u>(Dianthus)</u>
Tall Primrose	<u>(Oenothera)</u>
Tall Godetia	<u>(Godetia)</u>
Tidy Tips	<u>(Layia)</u>
White Yarrow	<u>(Achillea)</u>
Wild Thyme	<u>(Thymus)</u>
Zinnia	<u>(Zinnia)</u>

Applications of Acclaim 1EC Herbicide in the culture of the following ornamental plants will result in phytotoxicity:

<u>Common Name</u>	<u>Scientific Name</u>
Juniper, Barharbor	<u>(Juniperus)</u>
Philodendron	<u>(Philodendron)</u>
Salvia	<u>(Salvia)</u>
Podocarpus	<u>(Podocarpus)</u>
Pittosporum	<u>(Pittosporum)</u>

WEED SPECIES CONTROLLED

Acclaim 1EC Herbicide will control the following annual grassy weeds:

✓

WEED SPECIES SUPPRESSED

Acclaim will temporarily suppress the growth of the following perennial grassy weeds:

<u>Common Name</u>	<u>Scientific Name</u>
Common Bermudagrass	(<u>Cynodon dactylon</u>)
Johnsongrass (rhizome)	(<u>Sorghum halepense</u>)

Acclaim 1EC Herbicide will suppress the growth of common Bermudagrass and rhizome Johnsongrass. Apply Acclaim at 23 ounces/acre (0.53 ounces/1000 sq.ft.) as soon as common Bermudagrass or rhizome Johnsongrass begins growth. Repeat applications of Acclaim every 28-35 days (never sooner than 14 days) to continue growth suppression of these species.

Figure 1 consists of a 3x3 grid of scatter plots. The rows are labeled 'Number of children' with values 1, 2, and 3. The columns are labeled 'Number of children in the household' with values 1, 2, and 3. Each plot shows a positive correlation between the two variables. The plots are arranged in a grid where the x-axis represents the 'Number of children in the household' and the y-axis represents the 'Number of children'.

APPLICATION INFORMATION

Acclaim 1EC Herbicide only controls grasses which are emerged at the time of spraying. Young actively growing grassy weeds are more easily controlled than larger grassy weeds. Refer to the following application rate and timing recommendation chart for dosages. Avoid applications to ornamentals under stress due to lack of moisture, chemical injury or temperature extremes.

ACCLAIM 1EC HERBICIDE APPLICATION RATE AND TIMING RECOMMENDATION CHART

Annual Grassy Weed Growth Stage	Fluid Oz/ Acre	Fluid Oz/ ₂ 1,000 ft.
Untillered	15	0.34
1 tiller to 2 tiller	23	0.53
3 tiller to 4 tiller	32	0.73
4 tiller to 5 tiller	45	1.02

Pressurized Hydraulic Sprayer Application

Apply Acclaim 1EC Herbicide by means of a pressurized hydraulic sprayer using 30-60 PSI and 30-60 gallons of water per acre (0.7 to 1.4 gallons of finished spray per 1,000 sq.ft.). **Thorough spray coverage is essential for optimum results.** Flat fan nozzles are recommended.

High Volume Handgun Spray Application

If a low pressure (<30 psi), high volume (>60 gpa) handgun type sprayer is utilized, the addition of a surfactant at 32 ounces per 100 gallons is recommended. **Thorough coverage is essential for optimum results.**

Hand-Held Sprayer Application for Spot Treatments

For hand-held pump-type sprayers, add 0.34 - 0.53 fluid ounces of Acclaim 1EC Herbicide per gallon of water. Apply the lower rate when grassy weeds have less than two tillers. Spray target weeds thoroughly to the point of spray deposit runoff. **Optimum results occur when spray coverage is thorough.** The addition of a surfactant will improve coverage. A dye or colorant may be added to avoid spray pattern overlap.

Repeat Application Information

Repeat applications of Acclaim 1EC Herbicide may be required under the following conditions (refer to application rate and timing recommendation chart for dosages):

- (a) Continued grassy weed seed germination after the initial application.
- (b) When dense populations of weeds prevent thorough spray coverage of the entire leaf surface of target weeds.
- (c) For suppression of common Bermudagrass, repeat applications of Acclaim 1EC Herbicide may be necessary to retard new growth.
- (d) For suppression of rhizome Johnsongrass, apply Acclaim 1EC Herbicide when the Johnsongrass is 24-60" tall. For best results, do not apply within 3 weeks following a mowing. Mowing immediately after the application may reduce the effectiveness of the Acclaim 1EC Herbicide treatment.

Do not apply more than a total of 138 ounces per acre (3.16 ounces/1000 sq.ft.) per growing season. Apply Acclaim 1EC Herbicide at 23 fl.oz./acre (0.53 oz./1000 sq.ft.) as soon as common Bermudagrass or rhizome Johnsongrass begins growth. Repeat applications of Acclaim 1EC Herbicide every 28-35 days (never sooner than 14 days) to continue growth suppression of these species. Repeat Acclaim 1EC Herbicide applications should only be made to grassy weeds with vigorous growth. If stunting or injury occurred with the previous application, avoid applying until turfgrass recovery is complete (unless temporary stunting can be tolerated).

NOTES

- 1. Stunting and/or chlorosis may occur on succulent, rapidly growing ornamentals. Symptoms are temporary and will subside.
- 2. Adequate soil moisture will enhance the performance of Acclaim 1EC Herbicide. Avoid application of Acclaim 1EC Herbicide under **DROUGHT STRESS** conditions. Thorough irrigation one to two days before or within one day after application will be helpful under these conditions. Rainfall or irrigation within one hour of application may cause a reduction in grass control. Allow spray deposit to dry before irrigation.
- 3. **DO NOT APPLY** this product through any type of irrigation system.

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DIRECTIONS FOR USE IN RIGHTS-OF-WAY

Acclaim 1EC Herbicide can be applied to all cultivars of the following cool season grass species:

<u>Common Name</u>	<u>Scientific Name</u>
Smooth Brome	(<u>Bromus inermis</u>)
Perennial Ryegrass	(<u>Lolium perenne</u>)
Fine Fescue	(<u>Festuca rubra</u> spp.)
Tall Fescue	(<u>Festuca arundinaceae</u>)
Common Bermudagrass	(<u>Cynodon dactylon</u>)
Wheatgrass	(<u>Agropyron</u> spp.)

Acclaim 1EC Herbicide can be applied alone postemergence to established wildflower species as a broadcast spray for control of grassy weeds in the following:

WILDFLOWER SPECIES

<u>Common Name</u>	<u>Scientific Name</u>
African Daisy	(<u>Dimorphotheca</u>)
Annual Indian Blanket	(<u>Gaillardia</u>)
Baby Blue Eyes	(<u>Nemophila</u>)
Baby's Breath	(<u>Gypsophila</u>)
Birds Eyes	(<u>Gilia</u>)
Black-Eyed Susan	(<u>Rudbeckia</u>)
Blue Bells	(<u>Mertensia</u>)
Blue Flax	(<u>Linum</u>)
California Poppy	(<u>Eschscholzia</u>)
Catchfly	(<u>Silene</u>)
Corn Poppy	(<u>Papaver</u>)
Cosmos	(<u>Cosmos</u>)
Creeping Zinnia	(<u>Sanvitalia</u>)
Dames Rocket	(<u>Hesperis</u>)
Dwarf Columbine	(<u>Aquilegia</u>)
Dwarf Cornflower	(<u>Centaurea</u>)
Dwarf Lance Leafed Coreopsis	(<u>Coreopsis</u>)
English Wallflower	(<u>Cheiranthus</u>)
Forget-Me-Not	(<u>Anchusa</u>)
Garland Chrysanthemums	(<u>Chrysanthemum</u>)
Gilia	(<u>Gilia</u>)
Globe Gilia	(<u>Gilia</u>)
Johnny Jump Up	(<u>Viola</u>)
Lemon Mint	(<u>Monarda</u>)
Maiden Pinks	(<u>Dianthus</u>)
Missouri Primrose	(<u>Oenothera</u>)
Mountain Phlox	(<u>Phlox</u>)
Pimpernel	(<u>Anagallis</u>)
Prairie Coneflower	(<u>Ratibida</u>)
Purple Coneflower	(<u>Echinacea</u>)

WILDFLOWER SPECIES (Continued)

<u>Common Name</u>	<u>Scientific Name</u>
Red Yarrow	(<u>Achillea</u>)
Rocket Markspur	(<u>Delphinium</u>)
Rocky Mountain Penstemon	(<u>Penstemon</u>)
Roman Chamomile	(<u>Matricaria</u>)
Scarlet Flax	(<u>Linum</u>)
Siberian Wallflower	(<u>Erysimum</u>)
Small Burnet	(<u>Sanguisorba</u>)
Soapwort	(<u>Saponaria</u>)
Spurred Snapdragon	(<u>Linaria</u>)
Starflower	(<u>Trientalis</u>)
Sweet Allyssum	(<u>Lobularia</u>)
Sweet Williams	(<u>Dianthus</u>)
Tall Evening Primrose	(<u>Oenothera</u>)
Tall Gedetia	(<u>Godetia</u>)
Tall Plains Coreopsis	(<u>Coreopsis</u>)
Tidy Tips	(<u>Layia</u>)
White Yarrow	(<u>Achillea</u>)
Wild Thyme	(<u>Thymus</u>)

ESTABLISHED DESIRABLE NATIVE GRASSES

<u>Common Name</u>	<u>Scientific Name</u>
Big Bluestem	(<u>Andropogon</u>)
Blue Grama	(<u>Bouteloua</u>)
Little Bluestem	(<u>Andropogon</u>)
Sideoats Grama	(<u>Bouteloua</u>)

Acclaim 1EC Herbicide will control the following grassy weeds:

<u>Common Name</u>	<u>Scientific Name</u>
Smooth Crabgrass	(<u>Digitaria ischaemum</u>)
Hairy Crabgrass	(<u>Digitaria sanguinalis</u>)
Goosegrass/Silver Crabgrass	(<u>Eleusine indica</u>)
Barnyardgrass	(<u>Echinochloa crus-galli</u>)
Foxtail Species	(<u>Setaria spp.</u>)
Panicum Species	(<u>Panicum spp.</u>)
Johnsongrass	(<u>Sorghum halepense</u>)
Wild Oats	(<u>Avena fatua</u>)
Roughstalk Bluegrass	(<u>Poa trivialis</u>)
Sandbur	(<u>Cenchrus incertus</u>)
Shattercane	(<u>Sorghum bicolor</u>)

APPLICATION INFORMATION

Acclaim 1EC Herbicide only controls grasses that have emerged at the time of spraying. Young actively growing grassy weeds are more easily controlled than the larger grassy weeds. Refer to the following application rate and timing recommendation chart for dosages. Avoid applications to grass under drought stress.

ACCLAIM USE RATES PER ACRE		
Grassy Weed Growth Stage	Fluid Ounces Per Acre	Pints Per Acre
ANNUAL GRASSES		
1 Tiller	19	1.2
2 Tillers	24	1.5
4 Tillers	32	2.0
5 Tillers	45	2.8
Grassy Weed Growth Stage	Fluid Ounces Per 100 Gallons	Pints Per 100 Gallons
SEEDLING JOHNSONGRASS		
Up to 12"	19	1.2
12-24"	24	1.5
RHIZOME JOHNSONGRASS		
Up to 24"	32	2.0
24-60 Inches	45	2.8
Repeat Applications		
Up to 12"	12	0.8
12 to 24"	32	2.0
24 to 60"	45	2.8

SPRAY APPLICATION FOR SPOT TREATMENTS

Add 48 fluid ounces of Acclaim 1EC Herbicide per 100 gallons of water and spray target weed thoroughly to the point of spray deposit runoff. Optimum results occur when spray pressure is sufficient to provide retention of spray deposit on target weed.

DIRECTIONS FOR USE OF ACCLAIM 1EC HERBICIDE IN TANK MIXES :

For improved turfgrass tolerance and improved annual grass and Johnsongrass control, a tank mix of Acclaim 1EC Herbicide and Fusilade 2000 Herbicide may be applied on roadside rights-of-way. For best results, Acclaim 1EC Herbicide should be applied at 8 fl.oz. per acre and Fusilade 2000 Herbicide should be applied at 12 to 14 fl.oz. per acre. When utilizing this tank mix, the annual grasses should be 1 leaf to 2 tillers in size; the rhizome Johnsongrass should be 10-25" in size. Crop oil concentrate should be added to this tank mix at 1% v/v (1 quart per 25 gallons of spray solution).

SPRAY APPLICATION FOR HIGHWAY RIGHTS-OF-WAY

Apply with ground equipment using 30-100 gallons of water per acre and 30-60 PSI of water to uniformly cover the vegetation in the area to be treated. Use a fixed boom, off-center nozzles or boomless straight stream nozzles properly calibrated to a constant speed of travel and rate of delivery. Allow mowed areas to regrow for at least 14 days before applying Acclaim 1EC Herbicide.

REPEAT APPLICATION INFORMATION

Repeat applications of Acclaim 1EC Herbicide may be required under the following conditions (refer to application rate and timing recommendation chart for dosages):

- (a) Continued grassy weed seed germination after the initial application
- (b) When dense populations of weeds prevent thorough spray coverage of the entire leaf surface of the target weeds

Do not apply more than a total of 138 ounces per acre (3.16 ounces/1000 sq.ft.) per growing season. Avoid applying a second application of Acclaim 1EC Herbicide sooner than 14 days after the first application. A second Acclaim 1EC Herbicide application should only be made to grassy weeds with vigorous regrowth.

SURFACTANTS AND CROP OILS

The addition of a non-ionic surfactant or paraffin-based crop oil at a rate of 32 ounces per 100 gallons of spray solution is recommended for spray volumes between 30 and 100 gallons per acre. Thorough spray coverage is extremely important for optimum results.

NOTES FOR WEED CONTROL IN RIGHTS-OF-WAY

1. Adequate soil moisture will enhance the performance of Acclaim 1EC Herbicide. Reduced control may occur with Acclaim 1EC Herbicide applied under DROUGHT STRESS conditions.
2. Rainfall within one hour following application may cause a reduction in grass control.
3. Broadleaf herbicides containing 2,4-D will reduce the effectiveness of Acclaim 1EC Herbicide. Tank mixes with Telar³, Escort³, or Garlon⁴ are recommended. Do not apply Acclaim 1EC Herbicide 5 days before a 2,4-D application or within 21 days following a 2,4-D application. DO NOT TANK MIX with any herbicides when applying Acclaim 1EC Herbicide to wildflower species. ✓
4. Acclaim 1EC Herbicide is a selective grassy weed herbicide, and has little or no activity on broadleaf plants or sedges.
5. Fescues and ryegrass may be overseeded immediately following Acclaim 1EC Herbicides applications. All other grass species should be overseeded after a 21-day waiting period.
6. Applications to Bermudagrass may result in temporary injury. Bermudagrass should be well established at the time of application or severe injury may result.

Trademark Information

- 1 Registered trademark of SDS Biotech Corporation
 - 2 Registered trademark of Lesco, Inc.
 - 3 Registered trademark of E.I. duPont de Nemours & Company
 - 4 Registered trademark of DowElanco
 - 5 Registered trademark of The Andersons
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