



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 16 1994

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AGRI RESEARCH DIV - U.S. REGULATORY AFFA
P.O. Box 400
Princeton, NJ 08543

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SUBJECT: Label Amendment Submission of 09/02/93 in Response to PR Notice 93-7
EPA Reg. No. 241-303
IMAGE HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, successfully **REMOVES THE PRODUCT FROM THE SCOPE** of PR Notice 93-7 once the comments (if any) on the attached sheet are addressed. Other than the alterations (if any) listed on the attached sheet, no further alterations to the labeling are necessary to reflect the requirements of the Worker Protection Standard.

Since your amendment proposes to delete uses directly and/or to delete uses implicitly through the use of exclusionary statements, the Agency will publish in the Federal Register a notice of receipt of your amendment to delete uses, as required by section 6(f)(1) of FIFRA. The Agency will defer action for 90 days from the date of the Federal Register notice to give affected minor users an opportunity to try to persuade you to retain the uses(s). When the comment period has expired, the Agency will approve the amendment unless you have withdrawn it, and stamp the amended labeling "accepted." Your stamped-accepted labeling will then be sent to you.

As described in Supplement A of PR Notice 93-11 (self-verification option), you may sell and distribute product bearing the submitted labeling before you receive a copy of your stamped-accepted labeling. Note that your registration is not amended until the comment period required by section 6(f)(1) of FIFRA has expired and the Agency has approved the amendment. Therefore, you may withdraw your proposed amendment at any time during the comment period and until you receive your stamped-accepted labeling.

Sincerely,

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James Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)



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Printed with Soy Ink
contains at least 50% recycled content

Certification Statement When Deviations Are Proposed

I certify that the revised labeling being submitted for this product is in complete accordance with the labeling requirements of PR Notice 93-7, which reflects the requirements of EPA's labeling regulations for worker protection statements (40 CFR part 156, subpart K), except where noted. I have, in one or more places in the revised labeling, proposed changes that deviate from the exact language or location specified in the PR Notice. I have identified all such statements by highlighting them in a way that distinguishes them from any other label revisions. I have attached an explanation for each proposed deviation. I have proposed no changes to this labeling other than those required to comply with 40 CFR part 156, subpart K. I understand that EPA cannot guarantee to render its decision on revised labeling not in complete conformance with PR Notice 93-7 by April 21, 1994. I understand that it would be a violation of FIFRA if I or my supplemental registrants were to sell or distribute this product after April 21, 1994, without amended labeling complying with the requirements of 40 CFR part 156, subpart K.

ACCEPTED
with COMMENTS
In EPA Letter Dated

FEB 16 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
241-303

IMAGE® 1.5 LC
herbicide

A Selective Herbicide for Use in Established:

- Bermudagrass
- Centipedegrass
- St. Augustinegrass
- Zoysiagrass
- Selected Landscape Ornamentals

ACTIVE INGREDIENT:

Ammonium salt of imazaquin (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-quinolinecarboxylic acid)*.....17.3%

INERT INGREDIENTS..... 82.7%

TOTAL.....100.0%

*Equivalent to 16.4% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-quinolinecarboxylic acid.

(1 gallon contains 1.5 pounds of active ingredient as the free acid)

EPA Reg. No. 241-303

EPA Est. No. 5905-AR-1

KEEP OUT OF REACH OF CHILDREN

CAUTION!/PRECAUCION!

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada amplimente.

See Additional Precautionary Statements Inside

In case of emergency endangering life or property involving this product, call collect, day or night, Area Code 201-835-3100.

AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
VEGETATION AND PEST CONTROL
WAYNE, NJ 07470 ©1993

Net Contents:

STATEMENT OF PRACTICAL TREATMENT

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

If in eyes: Flush eyes with plenty of water.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS

CAUTION!

Harmful if inhaled or absorbed through skin. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

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 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.

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown on golf courses or lawns and grounds.

Do not apply this product through any type of irrigation system.

Observe all cautions and limitations on this label and on the labels of products used in combination with IMAGE. The use of IMAGE not consistent with this label may result in plant injury. Keep container closed to avoid spills and contamination.

STORAGE AND DISPOSAL

- PROHIBITIONS: KEEP FROM FREEZING.
DO NOT store below 32°F.
DO NOT contaminate water, food, or feed by storage or disposal.
- PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
- CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Plant injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use or application of the product contrary to label instructions, all of which are beyond control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

Any damages arising from breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

American Cyanamid Company makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

GENERAL INFORMATION

IMAGE is a unique, versatile herbicide that will control or aid in the control of many important weeds in warm-season turfgrasses and selected landscape ornamentals. IMAGE may be used at weed control rates on established bermudagrasses, centipedegrasses, St. Augustinegrasses, zoysiagrasses and listed ornamentals. IMAGE will effectively control susceptible weeds when applied during the recommended application timings (pre and post). Postemergence control of weeds may require several weeks.

HERBICIDE COMBINATIONS (Warm-season turfgrasses)

IMAGE may be tank-mixed with registered preemergence and broadleaf postemergence herbicides and with methylarsonate herbicides, such as MSMA, to control weeds not controlled by IMAGE alone. DO NOT tank-mix IMAGE with other postemergence herbicides labeled for grass weed control in turf. IMAGE may be applied prior to or sequential to the use of all currently labeled preemergence and postemergence herbicides.

(Landscape ornamentals)

IMAGE may be tank mixed with pendimethalin or oryzalin to control weeds not controlled by IMAGE alone.

When IMAGE is used in tank-mixture with another herbicide, refer to each label for rates, methods of application, proper timing, weeds controlled, limitations and precautions. ALWAYS USE in accordance with the more restrictive label limitations and precautions. IMAGE cannot be mixed with any product containing a label prohibition against such mixing.

8/93

MIXING INSTRUCTIONS

Fill the spray tank one-half to three-quarters full with clean water. While agitating, add the required amount of IMAGE and then fill the remainder of the tank with water. Maintain agitation while spraying to ensure a uniform spray mixture.

When tank-mixing IMAGE with recommended herbicides, add the other herbicide to the spray tank first and make sure it is thoroughly mixed before adding IMAGE.

ADDITION OF SURFACTANTS

A nonionic surfactant at the rate of 2 pints per 100 gallons (0.25% v/v) should be added to the spray mixture. Add the nonionic surfactant to the spray mixture after herbicide(s) have mixed. An antifoaming agent may be added to the tank, if needed.

SPRAYING INSTRUCTIONS

Uniformly apply IMAGE sprays with a properly calibrated sprayer in sufficient volume to insure adequate coverage (40-200 gallons/acre). AVOID drift onto vegetables, flowers, and other desirable plants or injury may result. AVOID overlaps when spraying. A spray indicator dye may be added to prevent overlaps. DO NOT apply when wind velocity is greater than 10 mph.

SPECIAL PRECAUTIONS (Warm-season turfgrasses)

USE ONLY on well established non-stressed turfgrass with a dense and uniform stand. TEMPORARY YELLOWING may occur.

DO NOT use on golf or bowling greens.

DO NOT use on unlabeled turfgrass species, including dichondra.

DO NOT mow St. Augustinegrasses until 48 hours after application.

DO NOT use on tall fescue or mixed stands of tall fescue and bermudagrass when tall fescue is a desirable turfgrass. IMAGE may injure tall fescue.

DO NOT reseed or winter overseed or sprig turfgrass for 1-1/2 months after treatment.

DO NOT apply to newly planted, sprigged, or sodded turfgrass.

DO NOT use on winter overseeded turfgrasses such as ryegrass, bentgrass or Poa trivialis when those species are desirable.

DO NOT graze or feed clippings of treated turfgrasses.

DO NOT apply aerially.

SPECIAL PRECAUTIONS
(Landscape ornamentals)

USE ONLY on well-established non-stressed ornamentals or injury may result.

DO NOT apply to unlabeled ornamentals or annual bedding plants.

DO NOT use on container grown ornamental nursery stock.

DO NOT apply in the rooting area of unlabeled ornamentals or annual bedding plants or plant injury may result.

DO NOT apply in vegetable gardens.

DO NOT apply to soil where annual bedding plants may be planted the following year or plant injury may result.

IMAGE USE RATES

IMAGE should be applied at 1 to 1 1/3 qts. per acre (0.75 to 1 fl. oz. per 1000 sq. ft.). The high rate should be used where heavy weed infestations occur. Irrigation or rainfall of 0.5 inch is suggested within 1-7 days after application to wash IMAGE into the shoot/root zone where greatest weed control activity occurs.

SPRAY SOLUTION MIXING GUIDE

Spray Volume (gal/A)	Quarts of IMAGE to Mix Per 100 Gallons of Water	
	<u>0.75 oz/1000 sq.ft.</u>	<u>1.0 oz/1000 sq.ft.</u>
20	5	6-3/4
43	2-1/4	3-1/8
100	1	1-1/4
172	1/2	3/4

SPOT SPRAYING: For hand-held or back-pack sprayer, mix 2 fl. oz. of IMAGE per 3 gallons of water and spray to wet. For hose end sprayer (i.e. Ortho Spray-ette 4) add 3/4 fl. oz. of IMAGE to hose end container, fill with water to two gallon mark and apply over 1000 sq. ft. (the length in ft. times the width in ft. = sq. ft. in area).

TURFGRASSES
CONTROL OF SUMMER WEEDS

For the postemergence control of weeds such as the nutsedges, dollarweed, kyllinga, field sandbur, and ryegrass, applications should be timed following spring transition of the turf and prior to the onset of winter dormancy. This application timing would be the period of active turf and summer weed growth. Applications should not be made just prior to or during transition or during periods of very slow turf growth or severe discoloration could occur.

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WEED SPECIES CONTROLLED

GRASSES CONTROLLED:

Field Sandbur (Cenchrus incertus)
Perennial Ryegrass - overseeded (Lolium perenne)

SEDGES CONTROLLED:

Globe Sedge (Cyperus globosus)
Green Kyllinga (Kyllinga brevifolia)
Rice Flatsedge (Cyperus iria)
Purple Nutsedge (Cyperus rotundus)
Yellow Nutsedge (Cyperus esculentus)

IMAGE will aid in the control of and reduce competition from:

Dollarweed (Hydrocotyle umbellata)
Tall Fescue (Festuca arundinacea)
Violets (Viola sp.)
Crabgrass (Digitaria sp.)
Annual Sedge (Cyperus compressus)
Virginia Buttonweed (Diodia virginiana)

Notes:

- 1) For control of kyllinga and more rapid and improved control of the sedges the addition of MSMA (2 lb. ai/A) is suggested in methylarsonate tolerant turfgrasses.
- 2) A repeat application may be required for extended postemergence control of weeds such as dollarweed, kyllinga, the nutsedges, and perennial ryegrass.
- 3) Tolerant turfgrasses detoxify IMAGE. Best tolerance occurs under totally dormant or optimal growing conditions. When the turfgrasses are growing under marginal conditions, such as low temperatures, drought stress, compaction, etc., temporary yellowing or browning can occur and recovery may take 2-4 weeks.

CONTROL OF WINTER WEEDS

For the control of weeds such as wild garlic, wild onion, henbit, chickweed, lawn burweed, etc., applications should be timed to follow the first frost. IMAGE may be applied prior to or soon after emergence of the weeds listed below with the exception of wild onion and wild garlic which must be emerged at application time for control. Control of emerged weeds may take several weeks. Applications made prior to the first frost or later during the dormant period (inactive weed growth) may result in reduced weed control. Applications should not be made less than six weeks prior to the initiation of spring transition.

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WEEDS SPECIES CONTROLLED

GRASSES CONTROLLED:

Perennial Ryegrass - overseeded (Lolium perenne)

BROADLEAVES CONTROLLED:

Black Medic (Medicago lupulina)
Buttercup (Ranunculus parviflorus)
Chickweed, Common (Stellaria media)
Mouseear (Cerastium vulgatum)
Cutleaf Evening Primrose (Oenothera lanceolata)
Geranium Carolina (Geranium carolinum)
Dovetail (Geranium molle)
Hairy bittercress (Cardamine hirsuta)
Henbit (Lamium amplexicaule)
Knawel (Scalranthus annuus)
Lawn burweed (Soliva pterosperma)
Parsley-piert (Alchemilla arvensis)
Purple deadnettle (Lamium purpureum)
Red sorrel (Rumex acetosella)
White clover (Trifolium repens)
Wild garlic (Allium vineale)
Wild onion (Allium canadense)

IMAGE will aid in the control of and reduce competition from:

Annual bluegrass (Poa annua)
Cudweed (Gnaphalium purpureum)
Dandelion (Taraxacum officinale)
Tall fescue (Festuca arundinacea)

Notes:

- 1) Mowing of wild onion/garlic 1-2 weeks after treatment is recommended for improved appearance and initial control.
- 2) If product is applied where runoff is likely to occur, irrigation should be applied (0.5 inches) to wash the product into the soil to prevent injury of nearby sensitive turf such as overseeded areas, bentgrass and golf greens.
- 3) Applications should not be made just prior to or during spring transition or during periods of very slow turf growth or severe discoloration could occur. Do not apply IMAGE to St. Augustinegrass for winter weed control.

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LANDSCAPE ORNAMENTALS

IMAGE can be safely applied at the labeled use rates around and over the top of those plants listed below for the control of weeds listed on the label:

(Shrubs)

Indian Hawthorne (Raphiolepis indica)
Dwarf Yaupon Holly (Ilex vomitoria)
 'Schilling's Dwarf'
Blue Pfitzer Juniper (Juniperus chinensis)
 'Pfitzeriana Glauca'
Helleri Holly (Ilex crenata)
 'Helleri'
Red Tip Photinia (Photinia X fraseri)
Yucca (Yucca pendula)
Wax Myrtle (Merica cerifera)
Burford Holly (Ilex cornuta)
 'Burfordii'
Gardenia (Gardenia jasminoides)
 'Miami Supreme'
Flame of the Woods (Ixora coccinea)
Confederate Jasmine (Trachelospermum jasminoides)
Parsons Juniper (Juniperus squamata expansa)
 'Parsoni'
Blue Pacific Juniper (Juniperus conferta)
 'Blue Pacific'
Blue Rug Juniper (Juniperus horizontalis)
 'Wiltonii'

(Trees)

Red Grape Myrtle (Lagerstroemia indica)
 'Red'

(Groundcovers)

Asiatic Jasmine (Trachelospermum asiaticum)
 'Minima'
Giant Liriope (Liriope muscari)
 'Evergreen Giant'
Variegated Liriope (Liriope muscari)
 'Silvery Sunproof'
Pachysandra (Pachysandra terminalis)
Mondo Grass (Ophiopogon japonicus)

(Perennials)

Hosta (Hosta sp.)
 'Lancifolia'
Society Garlic (Tulbaghia violacea)

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Notes:

- 1) IMAGE applications should only be made to established plantings of the labeled ornamentals. Temporary growth suppression may be observed on some treated plants.
- 2) Only apply IMAGE to the listed plants or severe injury may result. The following ornamentals are known to be severely injured by IMAGE: Azalea, Viburnum, Pieris, Abelia, and Ligustrum.

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