

Renata K. Gaughan, Ph.D.
Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA 19106-2399

AUG 10 1999

Dear Dr. Gaughan

Subject: VISOR® 2E herbicide
MANDATE® 2E Herbicide
EPA Registration No. 707-251
Application and Letter Dated July 27, 1999, Request
To Amend Registration by Add To "Specific Use Restrictions"
on Labeling: Use Restrictions on Soil Series: Briones,
Kositas and Umland; and if Groundwater is Less than-
25 Feet from Surface and Flood Irrigation is Utilized
on Soil Series: Cortina, Decordova, Delhi, Indio and Myoma

The proposed labeling submitted with the subject application
and letter has been reviewed and found acceptable under the
Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as
amended, provided that you:

- o Submit one (1) copy of your final printed labeling
before you release the product for shipment under
the subject amended labeling.

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 con-
stitutes acceptance of this condition.

Stamped copies of the labels are enclosed for your records.

This Agency's concern for the contamination of water (surface
and ground water) with the monacid degradate of thiazopyr is
under review with EPA pesticide petitions 7F4893 and 7F4889
for residue tolerances for thiazopyr in lemons, grapes and
tree nuts.

Sincerely yours,


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

Enclosures (2 labels)

CONCURRENCES

SYMBOL	E.Wilson:Diskette REDs: 08-10-99						
SURNAME							
DATE							

15413-B1-E
7/12/99

<p>VISOR[®] 2E HERBICIDE</p>	 PHILADELPHIA, PA 19106
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VISOR 2E Herbicide is selective for the preemergence control of listed annual grasses and broadleaf weeds in oranges and grapefruit.

ACTIVE INGREDIENT

*Thiazopyr

3-pyridinecarboxylic acid, 2-(difluoromethyl)-5-(4,5-dihydro-2-thiazolyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-methyl ester-----22.3%

INERT INGREDIENTS-----77.7%

TOTAL 100.0%

Contains petroleum distillates

*Contains 240 grams per liter or 2 pounds per U.S. gallon of the active ingredient.

**ACCEPTED
with COMMENTS
in EPA Letter Dated**

AUG 10 1999

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

707-251

EPA REG NO. 707-251

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- Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes.

Get medical attention.

IF ON SKIN- Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED- Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If a person is unconscious, do not give anything by mouth and do not induce vomiting.

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

NOTE TO PHYSICIAN- May pose an aspiration pneumonia hazard.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Harmful if swallowed or inhaled. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Avoid contact with skin.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Protective eyewear
- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves, such as Nitrile or Neoprene

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 clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, 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 by cleaning of equipment or disposal of equipment washwaters.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

Under some conditions, VISOR 2E Herbicide may have a potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

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 long-sleeved shirt and long pants • Shoes plus socks
• Chemical-resistant gloves, such as Nitrile or Neoprene • Protective eyewear

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, pests, 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.**

STORAGE AND DISPOSAL

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

STORAGE- Store this product under dry conditions (between 14°F and 104°F). If crystals develop, place in a warm area (40°F) until crystals redissolve.

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.

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.

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.

USE DIRECTIONS FOR:

GRAPEFRUIT, SOUR ORANGE, SWEET ORANGE

FOR USE IN PERMANENTLY ESTABLISHED GROVES

GENERAL INFORMATION

VISOR 2E Herbicide controls most annual grasses and certain broadleaf weeds in oranges and grapefruit. VISOR 2E Herbicide can also be applied to new plantings.

For enhanced preemergence control of susceptible grassy and broadleaf weeds, a tank mixture of VISOR 2E Herbicide with Devrinol®, diuron, Goal®, Hyvar®, Krovar® I, Krovar® II, simazine, or Solicam® may be applied.

VISOR 2E Herbicide controls susceptible weeds as they germinate and is not active on emerged weeds. When applying postemergence herbicides such as paraquat (Gramoxone®) glyphosate (Roundup) or glyphosate-trimesium (Touchdown®), VISOR 2E Herbicide may be applied concurrently as a tank-mix partner. Read and follow all labeling for tank-mix partners.

DOSAGE

For mid-to-long-term control, apply VISOR 2E Herbicide at a rate of 2 to 4 pints per broadcast acre. Use higher rates where heavy weed pressure is anticipated, or where medium or fine textured soils exist. For short-term control, apply VISOR 2E Herbicide at a rate of 1 to 2 pints per broadcast acre. For season-long control, multiple applications may be required. Do not exceed 4 pints of VISOR 2E Herbicide per acre per year.

SOIL TEXTURES ARE DEFINED AS FOLLOWS:

COARSE	Sand, sandy loam, loamy sand
MEDIUM	Loam, silt loam, silt
FINE	Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay

Dosages described on this label are for broadcast applications. For banded application, the amount of VISOR 2E Herbicide used per acre should be reduced according to the following formula:

$$\frac{\text{Band Width (in inches)}}{\text{Distance between Row Width (in inches)}} \times \text{Rate per Broadcast Acre} = \text{Amount needed per Acre For Banded Application}$$

WEEDS CONTROLLED PREEMERGENCE

At dosages given above, VISOR 2E Herbicide will provide preemergence control or growth suppression of the following annual weeds:

ANNUAL GRASSES CONTROLLED

Alexandergrass	Crowfootgrass	Itchgrass
Barley, Little	Foxtail, Giant	Junglerice
Barnyardgrass	Foxtail, Green	Natalgrass
Brome, Ripgut	Foxtail, Yellow	Sandbur, Field
Canarygrass	Goosegrass	Shattercane
Crabgrass, Large	Guineagrass	Signalgrass, Broadleaf
		Sprangletop

ANNUAL BROADLEAF WEEDS CONTROLLED/SUPPRESSED

Beggarweed, Florida	Malva	Redmaids
Carpetweed	Mustard species	Rocket, London
Chickweed	Nightshade, black	Shepherdspurse
Eclipta	Pigweed	Sowthistle, Annual
Groundsel, Common	Purslane, Common	Spurge (Annual Species)
Lambsquarters, Common	Ragweed, Common	

NUTSEDGE SPECIES

VISOR 2E Herbicide at rates of 2 to 4 pints (0.5 to 1.0 lb. active) per acre, provides a significant level of nutsedge suppression, particularly on light (coarse) texture, low organic matter (< 1.0% OM) soils. Best results are achieved at highest rates and when sufficient rainfall or irrigation follows application (prior to emergence of nutsedge).

METHOD OF APPLICATION

VISOR 2E Herbicide should be directed to the soil. Avoid direct spray or drift on to citrus foliage, flowers or fruit. Apply in 20 or more gallons of water or fluid fertilizer solution to provide uniform spray distribution and coverage to the soil surface. Use higher volumes to ensure adequate soil coverage in high densities of emerged weeds or heavy trash. Use a low pressure sprayer. Spray equipment should be calibrated carefully before each use.

PROPER HANDLING INSTRUCTIONS

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas. Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment. Product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

MIXING DIRECTIONS

Fill the spray tank at least one-third full of clean water or fluid fertilizer solution. A compatibility test is suggested before tank mixing this product with fertilizers and/or other pesticides (refer to the STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST SECTION at the end of this label). With the pump and agitator running, add the recommended amount of herbicides to the spray tank. Complete filling of the tank to the desired quantity. Maintain agitation until spraying is completed.

CULTURAL CONSIDERATIONS

VISOR 2E Herbicide provides maximum activity, when uniformly distributed. Prior to application, the soil surface should be smooth and relatively free of crop and weed trash (decaying leaves, clippings, dead weeds, etc.). Leaves may be removed by blowing the area to be treated or by reducing the amount of surface mulch prior to application.

For best results, apply prior to weed germination. VISOR 2E Herbicide controls weeds as they germinate and is not active on emerged weeds. Emerged weeds **must** be destroyed either with tillage prior to application with a postemergence herbicide, such as paraquat (Gramoxone), glyphosate (Roundup) or glyphosate-trimesium (Touchdown) to remove existing vegetation. VISOR 2E Herbicide may be applied concurrently as a tank-mix partner.

VISOR 2E Herbicide can remain on the soil surface for up to 4 weeks without moisture for activation; however, best results are achieved when rainfall or irrigation occur within 7 days after application to position this product into the weed seed germination zone. Maximum activity is obtained when applications are made to dry soil immediately prior to rainfall or irrigation.

TANK MIXES WITH VISOR 2E HERBICIDE

IMPORTANT: Read and follow container labels of tank-mix partners and use as directed by labeling. Follow the most restrictive labeling.

For a broader spectrum of control of grassy and broadleaf weeds a tank mixture of VISOR 2E Herbicide with Devrinol®, diuron, Goal, Hyvar®, Krovar® I, Krovar II, simazine, or Solicam® may be applied.

When applying postemergence herbicides such as paraquat (Gramoxone®) glyphosate (Roundup) or glyphosate-trimesium (Touchdown™) VISOR 2E Herbicide may be applied concurrently as a tank mix partner. Read and follow all labeling for tank-mix partners.

SPECIFIC USE RESTRICTIONS

- Read and observe all label directions before using. When tank mixing, always read and follow product labeling.
- Do not apply VISOR 2E Herbicide within 90 days of harvest.
- Do not apply more than 4 pints (1.0 lb. active) of VISOR 2E Herbicide per broadcast acre per year.
- Avoid direct spray or drift on to citrus foliage, flowers or fruit.
- Do not contaminate irrigation water or water used for domestic purposes.
- Do not feed or allow any animals to graze on any areas treated with VISOR 2E Herbicide.
- VISOR 2E Herbicide should be applied only by ground application equipment except as specifically directed on this label or on other approved Rohm and Haas Company Supplemental Labeling.
- Do not apply when weather conditions favor drift. Avoid drift to all non-target areas.
- Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use.
- Do not apply this product to any area in which an endangered species has been identified or in such a manner that drift from applications of this product would result in destroying an endangered species. This limitation applies only to areas that have been identified by and are protected by State and Federal Agencies.
- Do not apply VISOR 2E Herbicide to fields where a significant portion (10% or more) contain the following soil series: Briones, Rositas or Umland.
- In fields where the depth to groundwater is less than 25 feet and flood irrigation is utilized, do not apply VISOR 2E Herbicide to fields where a significant portion (10% or more) contain the following soil series: Cortina, Decordová, Delhi, Indio or Myoma.
- **CHEMIGATION:** Do not apply this product through any type of irrigation system.

STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential. The test follows:

A: Materials Required For A Compatibility Test

- 1) Two one-quart jars with lid or stopper (marked "with" and "without").
- 2) TEAspoons (for a more exacting test, a five to ten milliliter (ml.) pipette or graduated cylinder is desirable).
- 3) Sprayable fluid fertilizer to be tested.
- 4) The herbicide chemicals to be mixed.
- 5) A compatibility agent if needed to keep the fertilizer and crop protection chemical in suspension.

B: Procedure

- 1) Add one pint of the sprayable fluid-fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

ADD ONE PINT LIQUID FERTILIZER TO BOTH QUART JARS.

- 2) To the jar marked "with", add 1/4 TEAspoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 TEAspoon in one pint is the equivalent of two pints per 100 gallons of liquid.

TO JAR MARKED "WITH" ADD COMPATIBILITY AGENT AND SHAKE TO MIX.

- 3) To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

ADD HERBICIDE(S) TO BOTH JARS AND SHAKE TO MIX.

AMOUNTS TO BE ADDED PER PINT OF SPRAYABLE FLUID FERTILIZER (ASSUMING VOLUME IS 25 GL./A)

HERBICIDE	RATE/A	=	LEVEL TEASPOONS
Wettable	1 lb.	=	1.5
Powders	2 lb.	=	3
or	3 lb.	=	4.5
Dry Flowables	4 lb.	=	6
	5 lb.	=	7.5

HERBICIDE	RATE/A	=	LEVEL TEASPOON	or	MILLILITERS
Emulsifiable	1 pint	=	0.5	or	2.4
Concentrate or	1 quart	=	1	or	4.7
Flowables or	2 quarts	=	2	or	9.5
Liquids or	3 quarts	=	3	or	14.2
Solutions	1 gallon	=	4	or	19.0
	5 quarts	=	5	or	23.8

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters; three pints = 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer.

C: Observations and Decisions

- 1) If the herbicide(s) and the sprayable fluid fertilizer are compatible.
- 2) If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge, gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form as described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent, the herbicide(s) should be premixed with water before adding to the spray tank.

Product protected by U.S. Patent No. 4,988,384. Other patents pending.

VISOR® and GOAL® are registered trademark names of ROHM AND HAAS COMPANY.

HYVAR®, KROVAR® I and KROVAR® II are registered trademark names of E.I. duPont de Nemours & Company.

SOLICAM® is a registered trademark name of Novartis.

DEVRIKOL®, GRAMOXONE® and TOUCHDOWN are trademark names of Zeneca Group Company.

ROUNDUP® is a registered trademark name of Monsanto Company.

*ROHM AND HAAS COMPANY, 100 INDEPENDENCE MALL WEST, PHILADELPHIA, PA.
19106, TELEPHONE (215)592-3000*

15413-B1-E
7/12/99

15117-B0-A
12/17/98

MANDATE™ 2E HERBICIDE



MANDATE 2E Herbicide is selective for the preemergence control of listed annual grasses and broadleaf weeds in oranges and grapefruit.

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MANDATE 2E Herbicide controls susceptible weeds as they germinate and is not active on emerged weeds. When applying postemergence herbicides such as paraquat (Gramoxone®) glyphosate (Roundup) or glyphosate-trimesium (Touchdown®), MANDATE 2E Herbicide may be applied concurrently as a tank-mix partner. Read and follow all labeling for tank-mix partners.

DOSAGE

For mid-to-long-term control, apply MANDATE 2E Herbicide at a rate of 2 to 4 pints per broadcast acre. Use higher rates where heavy weed pressure is anticipated, or where medium or fine textured soils exist. For short-term control, apply MANDATE 2E Herbicide at a rate of 1 to 2 pints per broadcast acre. For season-long control, multiple applications may be required. Do not exceed 4 pints of MANDATE 2E Herbicide per acre per year.

SOIL TEXTURES ARE DEFINED AS FOLLOWS:

COARSE	Sand, sandy loam, loamy sand
MEDIUM	Loam, silt loam, silt
FINE	Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay

Dosages described on this label are for broadcast applications. For banded application, the amount of MANDATE 2E Herbicide used per acre should be reduced according to the following formula:

$$\frac{\text{Band Width (in inches)}}{\text{Distance between Row Width (in inches)}} \times \text{Rate per Broadcast Acre} = \text{Amount needed per Acre For Banded Application}$$

WEEDS CONTROLLED PREEMERGENCE

At dosages given above, MANDATE 2E Herbicide will provide preemergence control or growth suppression of the following annual weeds:

ANNUAL GRASSES CONTROLLED

Alexandergrass	Crowfootgrass	Itchgrass
Barley, Little	Foxtail, Giant	Junglerice
Barnyardgrass	Foxtail, Green	Natalgrass
Brome, Ripgut	Foxtail, Yellow	Sandbur, Field
Canarygrass	Goosegrass	Shattercane
Crabgrass, Large	Guineagrass	Signalgrass, Broadleaf
		Sprangletop

ANNUAL BROADLEAF WEEDS CONTROLLED/SUPPRESSED

Beggarweed, Florida	Malva	Redmaids
Carpetweed	Mustard species	Rocket, London
Chickweed	Nightshade, black	Shepherdspurse
Eclipta	Pigweed	Sowthistle, Annual
Groundsel, Common	Purslane, Common	Spurge (Annual Species)
Lambsquarters, Common	Ragweed, Common	

NUTSEDGE SPECIES

MANDATE 2E Herbicide at rates of 2 to 4 pints (0.5 to 1.0 lb. active) per acre, provides a significant level of nutsedge suppression, particularly on light (coarse) texture, low organic matter (< 1.0% OM) soils. Best results are achieved at highest rates and when sufficient rainfall or irrigation follows application (prior to emergence of nutsedge).

METHOD OF APPLICATION

MANDATE 2E Herbicide should be directed to the soil. Avoid direct spray or drift on to citrus foliage, flowers or fruit. Apply in 20 or more gallons of water or fluid fertilizer solution to provide uniform spray distribution and coverage to the soil surface. Use higher volumes to ensure adequate soil coverage in high densities of emerged weeds or heavy trash. Use a low pressure sprayer. Spray equipment should be calibrated carefully before each use.

PROPER HANDLING INSTRUCTIONS

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas. Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment. Product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

MIXING DIRECTIONS

Fill the spray tank at least one-third full of clean water or fluid fertilizer solution. A compatibility test is suggested before tank mixing this product with fertilizers and/or other pesticides (refer to the STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST SECTION at the end of this label). With the pump and agitator running, add the recommended amount of herbicides to the spray tank. Complete filling of the tank to the desired quantity. Maintain agitation until spraying is completed.

CULTURAL CONSIDERATIONS

MANDATE 2E Herbicide provides maximum activity, when uniformly distributed. Prior to application, the soil surface should be smooth and relatively free of crop and weed trash (decaying leaves, clippings, dead weeds, etc.). Leaves may be removed by blowing the area to be treated or by reducing the amount of surface mulch prior to application.

For best results, apply prior to weed germination. MANDATE 2E Herbicide controls weeds as they germinate and is not active on emerged weeds. Emerged weeds **must** be destroyed either with tillage prior to application with a postemergence herbicide, such as paraquat (Gramoxone), glyphosate (Roundup) or glyphosate-trimesium (Touchdown) to remove existing vegetation. MANDATE 2E Herbicide may be applied concurrently as a tank-mix partner.

MANDATE 2E Herbicide can remain on the soil surface for up to 4 weeks without moisture for activation; however, best results are achieved when rainfall or irrigation occur within 7 days after application to position this product into the weed seed germination zone. Maximum activity is obtained when applications are made to dry soil immediately prior to rainfall or irrigation.

TANK MIXES WITH MANDATE 2E HERBICIDE

IMPORTANT: Read and follow container labels of tank-mix partners and use as directed by labeling. Follow the most restrictive labeling.

For a broader spectrum of control of grassy and broadleaf weeds a tank mixture of MANDATE 2E Herbicide with Devrinol®, diuron, Goal, Hyvar®, Krovar® I, Krovar II, simazine, or Solicam® may be applied.

When applying postemergence herbicides such as paraquat (Gramoxone®) glyphosate (Roundup) or glyphosate-trimesium (Touchdown™) MANDATE 2E Herbicide may be applied concurrently as a tank mix partner. Read and follow all labeling for tank-mix partners.

SPECIFIC USE RESTRICTIONS

- Read and observe all label directions before using. When tank mixing, always read and follow product labeling.
- Do not apply MANDATE 2E Herbicide within 90 days of harvest.
- Do not apply more than 4 pints (1.0 lb. active) of MANDATE 2E Herbicide per broadcast acre per year.
- Avoid direct spray or drift on to citrus foliage, flowers or fruit.
- Do not contaminate irrigation water or water used for domestic purposes.
- Do not feed or allow any animals to graze on any areas treated with MANDATE 2E Herbicide.
- MANDATE 2E Herbicide should be applied only by ground application equipment except as specifically directed on this label or on other approved Rohm and Haas Company Supplemental Labeling.
- Do not apply when weather conditions favor drift. Avoid drift to all non-target areas.
- Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use.
- Do not apply this product to any area in which an endangered species has been identified or in such a manner that drift from applications of this product would result in destroying an endangered species. This limitation applies only to areas that have been identified by and are protected by State and Federal Agencies.
- Do not apply MANDATE 2E Herbicide to fields where a significant portion (10% or more) contain the following soil series: Briones, Rositas or Uhland.
- In fields where the depth to groundwater is less than 25 feet and flood irrigation is utilized, do not apply MANDATE 2E Herbicide to fields where a significant portion (10% or more) contain the following soil series: Cortina, Decordova, Delhi, Indio or Myoma.
- **CHEMIGATION:** Do not apply this product through any type of irrigation system.

STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential. The test follows:

A: Materials Required For A Compatibility Test

- 1) Two one-quart jars with lid or stopper (marked "with" and "without").
- 2) TEAspoons (for a more exacting test, a five to ten milliliter (ml.) pipette or graduated cylinder is desirable).
- 3) Sprayable fluid fertilizer to be tested.
- 4) The herbicide chemicals to be mixed.
- 5) A compatibility agent if needed to keep the fertilizer and crop protection chemical in suspension.

B: Procedure

- 1) Add one pint of the sprayable fluid-fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

ADD ONE PINT LIQUID FERTILIZER TO BOTH TWO QUART JARS.

- 2) To the jar marked "with", add 1/4 TEAspoon or 1.2 milliliters of a suitable compatibility agent: shake gently for five to ten seconds to mix. (1/4 TEAspoon in one pint is the equivalent of two pints per 100 gallons of liquid.

TO JAR MARKED "WITH" ADD COMPATIBILITY AGENT AND SHAKE TO MIX.

- 3) To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

ADD HERBICIDE(S) TO BOTH JARS AND SHAKE TO MIX.

AMOUNTS TO BE ADDED PER PINT OF SPRAYABLE FLUID FERTILIZER (ASSUMING VOLUME IS 25 GL./A)

HERBICIDE	RATE/A		LEVEL TEASPOONS
Wettable	1 lb.	=	1.5
Powders	2 lb.	=	3
or	3 lb.	=	4.5
Dry Flowables	4 lb.	=	6
	5 lb.	=	7.5

HERBICIDE	RATE/A		LEVEL TEASPOON		MILLILITERS
Emulsifiable	1 pint	=	0.5	or	2.4
Concentrate or	1 quart	=	1	or	4.7
Flowables or	2 quarts	=	2	or	9.5
Liquids or	3 quarts	=	3	or	14.2
Solutions	1 gallon	=	4	or	19.0
	5 quarts	=	5	or	23.8

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters three pints = 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer.

C: Observations and Decisions

- 1) If the herbicide(s) and the sprayable fluid fertilizer are compatible.
- 2) If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, cludge, gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form as described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

If incompatibility in any form as described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent, the herbicide(s) should be premixed with water before adding to the spray tank.

Product protected by U.S. Patent No. 4,988,384. Other patents pending.

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HYVAR®, KROVAR® I and KROVAR® II are registered trademark names of E.I. duPont de Nemours & Company.

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