



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

File

MAR 30 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Kim Davis
REGWEST COMPANY
AGENT FOR: GLADES FORMULATING CORPORATION
BOX 2220
GREELEY, CO 80632

Subject: Label Amendment Submission of 09/13/93 in Response to PR Notice 93-7
EPA Reg. No. 57242-3
GLADEZINE 4L

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

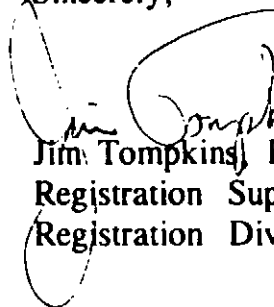
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



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

Attachment

BEST AVAILABLE COPY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Kim Davis
REGWEST COMPANY
AGENT FOR: GLADES FORMULATING CORPORATIO
BOX 2220
GREELEY CO 80632

Comment for: EPA Reg Nr.57242-3
GLADEZINE 4L

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

User Safety Recommendations must either be placed in a box or printed on the label in a contrasting color from surrounding text.

The glove requirement for "applicators and other handlers" in the "Personal Protective Equipment" section on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Waterproof gloves." The exact location is shown in Sections A and B on Part I of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

The glove requirement for "mixers and loaders" in the "Personal Protective Equipment" section on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Waterproof gloves" under "Mixers and Loaders must wear". The exact location is shown in Sections A and C on Part 1 of the Product Worksheet in Supplement Three A to PR Notice 93-7.

Insert the following statement above the Agricultural Use Requirements box: "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." The exact location is shown in Section F on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

BEST AVAILABLE COPY

11-10

**RESTRICTED USE PESTICIDE
(GROUND WATER CONCERN)**

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certification.

This product is a restricted-use herbicide due to ground water concerns. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground water.

**GLADEZINE 4L
HERBICIDE**

For Season-Long Weed Control in Corn
and
Weed Control in Sugarcane
and Turfgrass for Sod

ACTIVE INGREDIENTS:

| | |
|---|---------------|
| Atrazine: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine | 40.8% |
| Related compounds | 2.2% |
| INERT INGREDIENTS | <u>57.0%</u> |
| TOTAL | 100.0% |

Contains 4 pounds active ingredient per gallon.

Shake well before using

Use entire contents at one time

Keep Out of Reach of Children

CAUTION

See additional precautionary statements at end of label.

EPA Reg. No. 57242-3

EPA Est. 57242-FL-1

_____ Gallons

U.S. Standard Measure

BEST AVAILABLE COPY

ACCEPTED
with COMMENTS
in EPA Letter Dated

1/1/91

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 57242-3

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

CONDITIONS OF SALE AND WARRANTY

The Directions for 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. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Glades Formulating Corporation or the Seller. All such risks shall be assumed by the Buyer.

Glades Formulating Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. Glades Formulating Corporation makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Glades Formulating Corporation or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Glades Formulating Corporation and the Seller offer this product, and the Buyer and use accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing and signed by a duly authorized representative of Glades Formulating Corporation.

DIRECTIONS FOR USE

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

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. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Waterproof gloves
- Chemical-resistant footwear plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

Do not apply through any type of irrigation system.

BEST AVAILABLE COPY

(1/6

~~Do not apply this product in such a manner as to directly or through drift expose workers or other persons, except those knowingly involved in the application. The area being treated must be vacated by unprotected persons.~~

~~Do not enter treated areas without protective clothing until sprays have dried.~~

~~Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.~~

~~Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given which inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and appropriate actions to take in case of accidental exposure as described under "Precautionary Statements" on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information:~~

CAUTION

~~Area treated with Atrazine on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, flush eyes or skin with plenty of water. Call a physician if irritation persists. Remove and wash contaminated clothing before reuse.~~

GENERAL INFORMATION

This herbicide controls many annual broadleaf and grass weeds in corn, sugarcane and turfgrass grown for sod. This product may be applied before or after weeds emerge.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, and weeds controlled by this product are expected to be present with resistant biotypes, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide. Consult with your State Agricultural Extension Service for specific recommendations.

Since this product acts mainly through root absorption, its effectiveness depends on moisture to move it into the root zone. If weeds develop, a shallow cultivation will generally result in better weed control.

This product is noncorrosive to equipment and metal surfaces, nonflammable, and has low electrical conductivity.

Avoid using near adjacent desirable plants or in greenhouses, or injury may occur. To avoid spray drift, do not apply under windy conditions. Avoid spray overlap as crop injury may result. Where the use directions give a range of rates, use the lower rate on coarse-textured soil and soil low in organic matter; use the higher rate on fine-textured soil and soil high in organic matter. **NOTE:** Glades Formulating Corporation does not recommend applications in combination with other herbicides or oils, except as specifically described on this label.

APPLICATION PROCEDURES

Ground Application: Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and are the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 10 gallons of spray mixture per acre for all preplant incorporated, preplant surface, preemergence and postemergence applications (with or without oil or surfactant) with ground equipment.

Use a pump with capacity to (1) maintain 35-40 psi at nozzles; (2) provide sufficient agitation in tank to keep mixture in suspension; and (3) to provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gallons per minute per 100 gallons tank size circulated through a correctly positioned sparger tube or jets.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For band applications, calculate amount to be applied per acre as follows:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

Aerial Application: Use aerial application only where broadcast applications are specified. Apply in a minimum of 1 quart of water for each quart of this product applied per gallons of water per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin, and should wash thoroughly before eating and at the end of each day's operation.

Application in Water or Liquid Fertilizer: Nitrogen solution or complete liquid fertilizer may replace all or part of the water as a carrier for preemergence, preplant incorporated, or preplant surface ground application on corn. Check the compatibility of this product with liquid fertilizer and/or nitrogen solution as shown below before use. Do not apply in nitrogen solution or complete liquid fertilizer after corn emerges or crop injury may occur.

Compatibility Test: Since liquid fertilizers can vary, even within the same analysis, always check compatibility with herbicide(s) each time before use. Be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gals. per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.
2. To one of the jars add ¼ tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex[®] or Unite[®] (¼ tsp. is equivalent to 2 pts. per 100 gals. spray). Shake or stir gently to mix.
3. To both jars add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

Dry Herbicides: For each pound to be applied per acre, add 1.5 level tsp. to each jar.
 Liquid Herbicides: For each pint to be applied per acre, add 0.5 tsp. or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent

is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry the dry herbicide(s) in water before addition, or (B) add ½ of the compatibility agent to the fertilizer and the other ½ to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, do not use the mixture.

Application in Water Plus Emulsifiable Oil or Oil Concentrate: Adding emulsifiable oil (petroleum-derived, petroleum-derived oil concentrate, or single or mixed crop-derived oil concentrate) to postemergence water-based sprays in corn may improve weed control. However, under certain conditions, the use of either type of oil may seriously injure the crop. To minimize this possibility, observe the following directions:

Use one of the following properly emulsified:

1. A suitable oil concentrate containing at least 1% but not more than 20% suitable emulsifier or surfactant blend.
2. Petroleum-derived oil containing at least 1% suitable emulsifier.

NOTE: In the event of a compatibility problem when mixing oil with this product and water, a compatibility agent such as Compex or Unite should be used. Any of the above oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

Mixing Procedures - All Uses: (1) Be sure sprayer is clean and not contaminated with any other materials, or crop injury or sprayer clogging may result. (2) Fill tank 1/4 full with clean water, nitrogen solution, or complete liquid fertilizer. (3) Start agitation. (4) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. (5) Pour product directly into tank. (6) Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action. (7) Add emulsifiable oil, oil concentrate, or tank mix herbicide(s) after this product is thoroughly suspended. (8) Finish filling tank. (9) Empty tank as completely as possible before refilling to prevent buildup of oil or emulsifiable concentrate residue. Maintain agitation to avoid separation of materials. (10) If an oil or emulsifiable concentrate film starts to build up in tank, drain it and clean with strong detergent solution or solvent. (11) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

GLADEZINE 4L APPLIED ALONE - CORN

Preplant Surface-Applied, Preplant Incorporated, or Preemergence (or Postemergence at 4 pts./A With Oil)

Broadleaf and Grass Weeds Controlled:

Annual morningglory
Barnyardgrass (watergrass)
Cocklebur
Giant Foxtail*
Green Foxtail
Groundcherry
Jimsonweed
Kochia
Lambsquarters
Large (hairy) crabgrass*

Mustards
Nightshade
Pigweed
Purslane
Ragweed
Sicklepod
Velvetleaf (buttonweed)
Wild oats
Witchgrass (Panicum capillare)
Yellow Foxtail

*Indicates partial control only.

BEST AVAILABLE COPY

Postemergence with Emulsifiable Oil or Oil Concentrate in Water (at 2.4 pts./A) Broadleaf

Weeds Controlled:

| | |
|---------------------|----------------|
| Annual morningglory | Pigweed |
| Cocklebur | Ragweed |
| Jimsonweed | Smartweed |
| Lambsquarters | Velvetleaf |
| Mustards | Wild buckwheat |

Preplant Surface-Applied (Broadleaf and Grass Control): Use on medium- and fine-textured soil with minimum-tillage or no-tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI and WY. Apply 2/3 the recommended rate of this product shown in Table 1 for the soil texture as a split treatment 30-45 days prior to planting and the remainder at planting. Applications made less than 30 days prior to planting may be as either a split or single treatment. On coarse-textured soils, do not apply more than two weeks prior to planting.

If weeds are present at the time of treatment, apply in tank mix combination with a contact herbicide (for example, Gramoxone[®] Extra or Roundup[®]). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

NOTE: To the extent possible, do not move treated soils out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

Preplant Incorporated (Broadleaf and Grass Control): Broadcast in spring after plowing at rate in Table 1. Apply to the soil and incorporate before, during or after final seedbed preparation. Avoid deep incorporation. For best results, apply within two weeks prior to planting.

Preemergence (Broadleaf and Grass Control): Apply during or shortly after planting before weed emergence, at rate in Table 1.

Postemergence (Broadleaf and Grass Control): Apply before weeds exceed 1.5 inches in height and before corn exceeds 12 inches in height at rate in Table 1.

**TABLE 1
BROADLEAF AND GRASS WEED CONTROL ON CORN***

| SOIL TEXTURE | BROADCAST RATE/A |
|--|-------------------------|
| COARSE Sand, loamy sand, sandy loam | 4 pts. |
| MEDIUM Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay or silty clay with low organic matter | 4.75 pts. |
| FINE Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay or silty clay with medium to high organic matter, and clay (including the dark prairie soils of the Corn Belt) | 6 pts. |
| Peat, muck, and high organic clay (apply post-emergence only) | 6 pts. |

BEST AVAILABLE COPY

*Broadleaf Control (eastern CO, western KS, western NE, NM, OK Panhandle, west TX and eastern WY): On sand, loamy sand, sandy loam, mild to strongly alkaline soil and all recently leveled soil, apply no more than 2.4 pts./A, either preplant surface incorporated, or preemergence. On other soil in these areas, apply rate in Table 1 for broadleaf and grass control.

Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations. In Iowa, for example, maximum use rates have been established within a specific pesticide management area. Contact the Iowa Extension Service or the Iowa Department of Agriculture and Land Stewardship for additional information.

Postemergence with Emulsifiable Oil or Oil Concentrate in Water: Add the following volume of one of the type oils indicated for aerial or ground application unless the oil label specifies otherwise:

| TYPE OIL | GROUND APPLICATION | AERIAL APPLICATION |
|--|--------------------|--------------------|
| Oil concentrate (crop or petroleum-derived) | 1 qt./A | ½ - 1 qt./A |
| Petroleum-derived oil | 1 gal./A | 2 qts./A |

NOTE: Crop-derived or petroleum-derived oil concentrates should contain at least 1% but not more than 20% suitable emulsifier or surfactant blend. Petroleum-derived oils should contain at least 1% suitable emulsifier.

Broadleaf and Grass Control: For postemergence control of those weeds listed under "Preplant Incorporated and Preemergence," broadcast 4 pts./A plus emulsifiable oil or oil concentrate after weed emergence, but before weeds reach 1.5 inches in height and before corn exceeds 12 inches in height.

Broadleaf Control: For postemergence control of those weeds listed under "Postemergence with Emulsifiable Oil or Oil Concentrate in Water," broadcast 2.4 pts./A plus emulsifiable oil or oil concentrate before pigweed and lambsquarters reach 6 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

PRECAUTIONS: (For Applications with Emulsifiable Oil or Oil Concentrate in Water): (1) Inbred lines or any breeding stock may be severely injured by applications with emulsifiable oil or oil concentrate. (2) Adding other insecticides, herbicides, liquid fertilizers, or other materials is not recommended, because they may cause compatibility problems or crop injury. (3) Store and handle emulsifiable oil and oil concentrate carefully. Oil contaminated with even a small amount of water may not emulsify properly when added to the tank. To avoid crop injury, (4) do not apply when crop is under stress from prolonged cold, wet weather, poor fertility, or other factors, or when crop is wet and succulent from recent rainfall. (5) Do not exceed 3 lbs. active ingredient (or 6 pts. of this product) per acre per calendar year. (6) Postemergence applications to corn must be made before corn exceeds 12 inches in height. (7) Do not make more than one application per season except as recommended for partial control of yellow nutsedge, quackgrass and Canada thistle.

Problem Weeds Suppression

Yellow nutsedge and Canada thistle: This product will partially control (suppress) yellow nutsedge (*Cyperus esculentus*) and Canada thistle (*Cirsium arvense*) when applied according to directions. For best results, apply each year until yellow nutsedge or Canada thistle is eliminated or reaches a level of infestation where neither weed is an economic problem. If yellow nutsedge or Canada thistle regrow following last application, cultivate once.

Four alternative methods of use for partial control (suppression) of yellow nutsedge and Canada thistle are listed below in order of preference. If other weed species, such as annual grasses are also expected, use alternative 2 or 4.

1. Broadcast 3 pts./A plus 1 gal. of emulsifiable oil or 1 qt. of oil concentrate. Apply after crop and yellow nutsedge or Canada thistle emerge, but before yellow nutsedge reaches a height of 3 inches or Canada thistle reaches a height of 6 inches. Repeat application before corn exceeds 12 inches in height.

2. Broadcast 3 pts./A preplant incorporated for control of yellow nutsedge, or broadcast 3 pts./A during or shortly after planting, but prior to crop or weed emergence for control of Canada thistle. Follow with an application of 3 pts./A plus 1 gal. of emulsifiable oil or 1 qt. of oil concentrate after corn and weeds emerge, but before yellow nutsedge or Canada thistle reaches a height of 6 inches and before corn exceeds 12 inches in height.

3. Broadcast 6 pts./A plus 1 gal. of emulsifiable oil or 1 qt. of oil concentrate after crop emerges, but before corn exceeds 12 inches in height. Apply after yellow nutsedge and Canada thistle emerge, but before yellow nutsedge is 3 inches tall or Canada thistle is 6 inches tall.

4. Broadcast 6 pts./A before, during, or shortly after planting, but before crop or weed emergence (yellow nutsedge control only).

NOTE: Do not use emulsifiable oil or oil concentrate when corn is wet or under stress, especially when using 6 pts./A of this product, or crop injury may occur. See "Precautions for Applications with Emulsifiable Oil or Oil Concentrate in Water" for additional directions.

Quackgrass Suppression on Land Going into Corn Production

Split Application: Broadcast 3 pts./A in early spring. Plow 1-3 weeks later. Apply a second application at 3 pts./A in spring before, during, or after planting, but before weeds are 1.5 inches high and before corn exceeds 12 inches in height. This split application will suppress quackgrass and control most annual broadleaf and grass weeds.

Quackgrass Control on Land Going into Corn Production:

Make a single broadcast application of 6 pts./A in spring before planting. Plow 1-3 weeks later. Follow-up in the fall by utilizing a suitable contact herbicide, such as Roundup.

TANK MIXTURES FOR CORN

This product may be tank mixed with these herbicides for control of certain broadleaf and grass weeds in corn:

| | |
|---|-------------------------------------|
| Dual [®] (metolachlor) | Lasso or Lasso EC + Roundup |
| Dual + Gramoxone Extra | Lasso or Lasso EC + Gramoxone Extra |
| Dual + Roundup (glyphosate) | Gramoxone Extra |
| Dual + Princep [®] | Princep |
| Dual + Princep + Gramoxone Extra | Princep + Gramoxone Extra |
| Dual + Princep + Roundup | Princep + Roundup |
| Ramrod [®] (propachlor) | Roundup |
| Lasso [®] or Lasso EC (alachlor) | Sutan + [®] |

Use tank mix directions appearing on the labels of the above herbicides when tank mixing with this product. Observe all precautions and limitations on labeling of products used in a particular tank mix.

BEST AVAILABLE COPY

NOTE: When the labels of the above herbicides refer to Atrazine 80W, use equivalent rates of this product. One pound of 80W equals 1.6 pints of this product.

Princep 80W, Princep 4L or Princep Caliber[®] 90

In addition to the weeds listed under "GLADEZINE 4L Applied Alone - Corn: Preplant Surface-Applied, Preplant Incorporated, or Preemergence," this combination also controls crabgrass, fall panicum, and carpetweed.

Broadcast tank mix before planting, at planting or after planting, but before crop and weeds emerge, at rates in Table 2. Use the 1:1 ratio for control of most weeds. Use the 1:2 ratio for expected heavy infestations of crabgrass and fall panicum. Cultivate shallowly if weeds develop.

Preplant Surface Applied: Use on medium- and fine-textured soils with minimum-tillage or no-tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, MD, SD, WI and WY. Apply 2/3 the recommended rate of this product and Princep shown in Table 2 for the soil texture as a split treatment 30-45 days prior to planting and the remainder at planting. Applications made less than 30 days prior to planting may be as either a split or single treatment. On coarse-textured soils, do not apply more than two weeks prior to planting. Refer to the "GLADEZINE 4L Alone-Preplant Surface Applied" section of the label for additional details.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, Gramoxone or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

NOTE: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

Preplant Incorporated: Apply to the soil and incorporate in the spring before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within two weeks prior to planting.

Preemergence: Apply during or shortly after planting, but before crop and weeds emerge.

Refer to this label and to Princep 80W, Princep Caliber 90 or Princep 4L labels for further directions, limitations and precautions.

**TABLE 2
TANK MIXTURES WITH PRINCEP ON CORN**

| Soil Texture | BROADCAST RATE/A | | | |
|--|------------------|--------------------------|--------------|--------------------------|
| | 1:1 Ratio* | | 1:2 Ratio** | |
| | This Product | Princep 80W ¹ | This Product | Princep 80W ¹ |
| Sand, loamy sand, sandy loam | 2 pts. | 1.25 lbs. | 1.32 pts. | 1.67 lbs. |
| Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter | 2.4 pts. | 1.5 lbs. | 1.6 pts. | 2 lbs. |
| Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with medium to high organic matter, and clay (including dark prairie soils of the Corn Belt) | 3 pts. | 1.8 lbs. | 1.92 pts. | 2.4 lbs. |

BEST AVAILABLE COPY

*For control of most weeds.

**For control of expected heavy infestations of crabgrass and fall panicum.

¹When using Princep Caliber 90 or Princep 4L, use equivalent rates. One pound of Princep 80W equals 0.9 pounds of Princep Caliber 90 or 1.6 pints of Princep 4L.

Princep 80W, Princep 4L or Princep Caliber 90 plus Roundup: Use as tank mixture for preemergence and postemergence control of certain broadleaf and grass weeds where corn will be planted directly into a cover crop, established sod, or in previous crop residues. Refer to Roundup label for all directions, weeds controlled, precautions and limitations.

Princep 80W, Princep 4L or Princep Caliber 90 plus Gramoxone Extra: Use as tank mixture with Princep and Gramoxone Extra to kill existing vegetation and for residual weed control where corn will be planted directly into a cover crop, established sod, or in previous crop residues. Add this product and Princep to water in spray tank, agitating until thoroughly mixed. Then add Gramoxone Extra and a nonionic surfactant, such as X-77[®]. Continue agitation during application. Broadcast 2-4 pts. of this product plus 1.25-2.5 lbs. Princep 80W [or 2-4 pts. Princep 4L, or 1.1-2.2 lbs. Princep Caliber 90] plus a suitable amount of Gramoxone Extra in 20-60 gals. of water per sprayed acre. Refer to the Gramoxone Extra label for the appropriate rates to utilize in this tank mixture. Apply before, during, or after planting, but before corn emerges. Add 0.5 pts. of a nonionic surfactant, such as X-77, per 100 gals. of spray mixture. Use the higher rate of Gramoxone Extra specified on the label if existing vegetation is 4-6 inches tall. This mixture will not control weeds taller than 6 inches.

Refer to further limitations and precautions on labels for this product, Princep and Gramoxone.

Precautions for All Applications to Corn: (1) To avoid crop injury and illegal residues, do not apply more than 3 lbs./A active ingredient (6 pts./A of this product) per calendar year. (2) For best control of velvetleaf and cocklebur, the application rate cannot be less than 2 lbs./A active ingredient, either alone or in tank mix combinations. (3) Following harvest, plow (moldboard or disk-plow) and thoroughly till soil in fall or spring to minimize possible injury to spring-seeded rotational crops, regardless of rate used.

Note for all Applications to Corn: Do not graze or feed forage from treated areas for 21 days following application, or illegal residues may result.

Rotational Crops: (1) Do not rotate to any crop except corn or sorghum until the following year, or injury may occur. (2) If applied after June 10, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur. (3) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use only when corn is to follow corn or when a crop of untreated corn or sorghum is to precede other rotational crops. (4) In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans if the rate applied to corn was more than 4 pts./A or equivalent band application rate, or soybean injury may occur. (5) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer. (6) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year following application, or injury may occur.

SUGARCANE (Florida)

For control of many broadleaf and grass weeds, including amaranths, crabgrass, fireweed, Flora's paintbrush, foxtails, junglerice and wiregrass, broadcast 4-8 pts./A of this product at time of planting or ratooning, but before sugarcane emerges. Broadcast aerially in a minimum of 5 gals. of spray per acre, or broadcast or band by ground equipment in a minimum of 20 gals. per acre, unless indicated otherwise. One additional application may be made over the sugarcane as it emerges, and two additional applications may be made interline after emergence as directed sprays. Repeat treatments, where needed, may be applied broadcast, band, or interline

as suggested with the final application being prior to close-in. Do not exceed the rate of herbicide suggested for any one crop of sugarcane.

NOTE: Where high rates of atrazine are used alone, apply in a minimum of 1 qt. of water for each 1 qt. of this product applied per acre.

Aerial Application: In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply this product alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

For control of emerged pellitory weed: Apply 0.8-1.2 pts./A in at least 40 gals. of water as a directed spray by ground equipment prior to close-in. Add 4 qts. of surfactant for each 100 gals. of spray. Thoroughly cover weed foliage.

For control of alexandergrass, large crabgrass, pellitory (artillery) weed, and spiny amaranth, use one of the following methods at planting or ratooning:

1. Apply 8 pts./A preemergence. Follow with one or two applications, as needed, postemergence to sugarcane and weeds, at 4 pts./A. Treat before weeds exceed 1.5 inches in height.
2. Apply 1-3 times, as needed, at 4 pts./A postemergence to sugarcane and weeds. Treat before weeds exceed 1.5 inches in height.

TURFGRASSES FOR SOD (Florida Only)

St. Augustinegrass, Centipedegrass and Zoysia Grass:

Broadcast 4-8 pts./A according to soil texture to control those weeds listed under "GLADEZINE 4L APPLIED ALONE - CORN: Preplant Surface-Applied, Preplant Incorporated, or Preemergence."

| | | |
|--------------|--------|---|
| Muck or peat | 8 pts. | Old beds: Within 2 days after lifting sod |
| | | New beds: 3-4 days after sprigging or plugging |
| Sandy soil | 4 pts. | Old beds: Within 2 days after lifting sod |
| | | New beds: 7-10 days after sprigging or plugging |

If weeds regrow, apply an additional 4 pts./A on a muck or peat, or 2 pts./A on sandy soil.

PRECAUTIONS: To avoid crop injury, (1) Do not apply within 30 days prior to cutting or lifting. (2) Do not apply in combination with surfactants or other spray additives. (3) Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases. (4) On newly sprigged turfgrass, temporary slowing of growth may follow application.

STORAGE AND DISPOSAL

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

Storage: Ground water contamination may be reduced by diking and flooring or permanent liquid bulk storage sites with an impermeable material.

Pesticide Disposal: Open dumping is prohibited. Wastes resulting from the use of this product are acutely toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

Container Disposal: Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency call (919) 292-7100 day or night.

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

CAUTION: Harmful if swallowed, inhaled or absorbed through skin. Do not breathe vapors or spray mist. Avoid contact with eyes, skin or clothing.

~~Users are required to wear long-sleeved shirts and long pants or equivalent, chemical-resistant gloves, and boots (waterproofed). In addition, persons involved in mixing/loading operations are required to use chemical-resistant rubber or neoprene gloves and a face shield or goggles.~~

Statement of Practical Treatment

If Swallowed: Call a physician or poison control center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person. **If Inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention. **If On Skin:** Wash with plenty of soap and water. Get medical attention. **If In Eyes:** Flush with plenty of water. Call a physician if irritation persists. **NOTE TO PHYSICIAN:** There is no specific antidote for atrazine. If this product is ingested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal may be considered.

Personal Protective Equipment (PPE)

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

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks

Mixers and loaders must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

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.

Engineering Control Statements:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (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

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water. This product may not be mixed/loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes.

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water or wetlands. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

Caliber[®] trademark of Ciba-Geigy

Princep[®] trademark of Ciba-Geigy for simazine

Gramoxone[®] trademark of ICI Americas for paraquat

Lasso[®] trademark of Monsanto Company for alachlor

X-77[®] trademark of KALO Agricultural Chemicals, Inc.

Remrod[®] trademark of Monsanto Company for propachlor

Compex[®] trademark of KALO Agricultural Chemicals, Inc.

Unite[®] trademark of Hopkins Agricultural Chemical Company

Sutan +[®] trademark of Stauffer Chemical Company for butylate

Roundup[®] trademark of Monsanto Company for glyphosate herbicide

Dual[®] trademark of Ciba-Geigy for metolachlor (U.S. Patent No. 3,937,730)

GLADES FORMULATING CORPORATION

909 NW 13th Street
Belle Glade, FL 33430

0993WPS

BEST AVAILABLE COPY