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MAR 8 2005

Ms. Kim Davis, CC, APC
Agent for Glades Formulating Corporation
Glades Formulating Corporation
30856 Rocky Road
Greeley, CO 80631-9375

Dear Ms. Davis:

SUBJECT:

Gladeamine 3.8 2, 4-D Herbicide

Label Amendment

EPA Registration No. 57242-4

Submission Dated December 7, 2004

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. The amended label supersede all previously accepted ones. A stamped copy of the label is enclosed for your records. Please submit one copy of the final printed label before you release the product for shipment.

Sincerely yours,

Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505C)

Enclosure

### Gladeamine 3.8 2.4-D Herbicide

(Container Label)

For Selective Control of Many Broadleaf Weeds in Aquatic Areas, Non-Crop Areas, Grass Pastures, Rangelands and in Certain Crops

ACCEPTED with COMMENTS in MARY 2005

Also for Control of Trees by Injection

Contains Dimethylamine Salt of 2,4-D\*

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide

as amended for the pesticide registered under EPA Reg AND ve Ingredient:

2,4-dichlorophenoxyacetic acid\* - 38.4% - 3.8 lbs./gal. \*Isomer Specific by AOAC Method No. 978.05 (15<sup>th</sup> Ed.)

\*Salts are the least volatile forms of 2,4-D and do not release enough vapors from treated areas to reduce yield of adjacent susceptible crops.

## Keep Out of Reach of Children DANGER PELIGRO

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.)

# PRECAUTIONARY STATEMENTS Hazards to Humans & Domestic Animals DANGER PELIGRO

Corrosive; causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist. Thoroughly wash with soap and water atta: handling.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Waterproof gloves
- · Shoes plus socks
- Protective eyewear

**Note:** For containers over 1 gallon, but less than 5 gallons: Mixers and loaders who do not use a mechanical system (such as probe and pump or spigot) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to other required PPE.

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 are given, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

#### **Engineering Control Statements**

For containers of 5 gallons or more: Use a mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, rinse the probe before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS. When handlers use 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.
- Immediately remove clothing if pesticide gets inside, then thoroughly wash and put on clean clothing.
- Immediately remove PPE after handling this product. Wash the outside of gloves before removing. As soon as
  possible, thoroughly wash and change into clean clothing.

#### First Aid

|                    | First Ald  |
|--------------------|--|
| If in Eyes         | Hold eye open and rinse slowly and gently with water for 15-20 minutes.  |
|                    | Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye.  |
|                    | Call a poison control center or doctor for treatment advice.   |
| If Swallowed       | Immediately call a poison control center or doctor for treatment advice.   |
|                    | Have person sip a glass of water if able to swallow.   |
|                    | Do not induce vomiting unless told to do so by a poison control center or doctor.  |
|                    | Do not give anything by mouth to an unconscious person.  |
| If Inhaled         | Move person to fresh air.  |
|                    | • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. |
|                    | Call a poison control center or doctor for further treatment advice.   |
| If on Skin         | Take off contaminated clothing.  |
| or Clothing        | Immediately rinse skin with plenty of water for 15-20 minutes.   |
|                    | Call a poison control center or doctor for further treatment advice.   |
|                    | container or label with you when calling a poison control center or doctor or going for treatment. [You                              |
| may also call 1-86 | 00-xxx-xxxx for emergency medical treatment information.]  |
| Note to Physicia   | n: Probable mucosal damage may contraindicate the use of gastric lavage.   |

(Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.)

#### **Environmental Hazards**

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

**Mixing and Loading:** Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Exercise caution when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide reduces the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills helps prevent groundwater contamination.

#### **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. Refer to the label booklet under the *Agricultural Use Requirements* section for information about this Standard.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read Warranty Disclaimer and Limitation of Remedies inside label booklet.

Refer to booklet for complete Directions for Use **Agricultural Chemical:** Do not ship or store with food, feeds, drugs or clothing.

Net Contents: \_\_\_\_ Gallons

EPA Reg. No. 57242-4 EPA Est. 57242-FL-1 Glades Formulating Corporation P.O. Box 1690 Belle Glade, FL 33430-6286

### Gladeamine 3:8:2,4-D Herbicide

(Booklet)

For Selective Control of Many Broadleaf Weeds in Aquatic Areas, Non-Crop Areas, Grass Pastures, Rangelands and in Certain Crops

Also for Control of Trees by Injection

Contains Dimethylamine Salt of 2,4-D\*

Active Ingredient: 

Other Ingredients \_\_\_\_\_\_\_53.7% 

2,4-dichlorophenoxyacetic acid\* - 38.4% - 3.8 lbs./gal.

#### Keep Out of Reach of Children DANGER **PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detaile. (If you do not understand the label, find someone to explain it to you in detail.)

Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendation and Directions for Use including Agricultural Use Requirements and Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read the Warranty Disclaimer and Limitation of Remedies inside label booklet.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

Net Contents: \_\_\_\_ Gallons

EPA Reg. No. 57242-4 EPA Est. 57242-FL-1

> **Glades Formulating Corporation** P.O. Box 1690 Belle Glade, FL 33430-6286

<sup>\*</sup>Isomer Specific by AOAC Method No. 978.05 (15th Ed.)

<sup>\*</sup>Salts are the least volatile forms of 2,4-D and do not release enough vapors from treated areas to reduce yield of adjacent susceptible crops.

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- Shoes plus socks
- Protective evewear

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|--------------------|---|
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|                    | Call a poison control center or doctor for treatment advice.  |
| If Swallowed       | Immediately call a poison control center or doctor for treatment advice.                                |
|                    | Have person sip a glass of water if able to swallow.  |
|                    | Do not induce vomiting unless told to do so by a poison control center or doctor.                       |
|                    | Do not give anything by mouth to an unconscious person.   |
| if inhaled         | Move person to fresh air.   |
|                    | • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by |
|                    | mouth-to-mouth, if possible.  |
|                    | Call a poison control center or doctor for further treatment advice.                                    |
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| Note to Physician  | n: Probable mucosal damage may contraindicate the use of gastric lavage.                                |

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#### Environmental Hazards

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**Mixing and Loading:** Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Exercise caution when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide reduces the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills helps prevent groundwater contamination.

#### DIRECTIONS FOR USE

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

#### Carefully read all Directions for Use before applying.

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 48 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
- Waterproof gloves
- · Shoes plus socks
- Protective eyewear

#### Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

**Entry Restrictions for Non-WPS Uses:** When this product is applied to rangeland and established pastures not harvested for hay or seed; non-cropland areas; when applied only by tree injection in forest sites; and when applied in aquatic areas, do not allow people (other than the applicator) or pets in/on treatment area during application. Do not enter into treated areas until sprays have dried.

#### **General Information**

Gladeamine is intended for selective control of many broadleaf weeds in aquatic areas, non-crop areas, grass pastures, rangelands and in certain crops; also for control of trees by injection. Apply this product as a water or oil-water spray during warm weather when target weeds or woody plants are actively growing. Application under drought conditions will often give poor results. Use low spray pressure to minimize drift. Generally, the lower dosages recommended on this label will be satisfactory for young, succulent growth of susceptible weed species. For less susceptible species and under conditions where control is more difficult, use higher recommended rates. Deep-rooted perennial weeds such as Canada thistle and field bindweed and many woody plants usually require repeated applications for satisfactory control. Consult your state agricultural experiment station or extension service weed specialist for recommendations from this label that best fit local conditions.

#### **General Use Precautions and Restrictions**

Use of this product must conform to all application regulations.

Apply this product only as specified on this label.

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Excessive amounts of 2,4-D in the soil may temporarily inhibit seed germination and plant growth. Chemigation: Do not apply this product through any type of irrigation system.

#### **Avoiding Injury to Non-Target Plants**

Spray drift produced during application is the responsibility of the applicator. Take care to minimize off-target movement of spray during application. A drift control agent suitable for agricultural use may be used with this product to aid in reducing spray drift; if used, follow all use recommendations and precautions on the drift control agent's label.

Do not apply where drift may be a problem due to proximity to susceptible crops or other desirable broadleaf plants. Do not apply this product directly to, or otherwise permit contact with, cotton, flowers, fruit trees, grapes, ornamentals, vegetables or other desirable plants that are susceptible to 2,4-D herbicides. Do not permit spray mist containing 2,4-D to contact susceptible plants since even very small quantities of the spray, which may not be visible, causes severe injury during both active growth or dormant periods. Do not use in greenhouses.

Avoid Movement of Treated Soil: Avoid conditions under which soil from treated areas may be moved or blown to areas containing susceptible plants. Wind-blown dust containing 2,4-D may produce visible symptoms when deposited on susceptible plants; however, serious plant injury is unlikely. To minimize potential movement of 24,-D on wind-blown dust, avoid treatment of powdery dry or light sandy soils until soil is settled by rainfall or irrigation or irrigate soon after application.

Do not store or handle other agricultural chemicals with the same containers used for this product. Do not apply other agricultural chemicals or pesticides with equipment used to apply this product unless the equipment has been thoroughly cleaned to remove all traces of 2.4-D.

#### Spray Drift Management (Aerial Application)

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-andweather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outer-most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

In certain states additional regulations may be applicable to aerial application of this product. The applicator must be familiar with, and take into account, the information covered in the following Aerial Drift Reduction Advisory information section.

#### Aerial Spray Drift Advisory Information:

Importance of Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity and Temperature Inversion sections of this label).

#### Controlling Droplet Size:

- Volume: Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure: Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles: Use the minimum number of nozzles that provide uniform coverage.
- Nozzle orientation: Orient the nozzles to ensure the spray is released backwards, parallel to the airstream, to produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle type: Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- Boom length: For some use patterns reducing the effective boom length to less than % of the wingspan or rotor length may further reduce drift without reducing swath width.

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 Application height: Do not apply at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Applications at the lowest safe height reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a cross-wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Avoid application below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

**Temperature and Humidity:** When applying this product in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is more severe when conditions are both hot and dry.

Temperature Inversions: Do not apply this product during a low-level temperature inversion due to high drift potential. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: Apply this product when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

**Mixing:** Mix this product only with water, unless otherwise directed on this label. Add approximately half the water to the mixing tank, then add this product with agitation, and finally the rest of the water with continuing agitation. **Note:** Adding oil, wetting agent or other surfactant to the spray mixture may increase effectiveness on weeds, but may also reduce selectivity to crops, resulting in crop damage.

**Tank Mixing:** When tank mixing this product, read and follow the label of each tank mix product's precautionary statements, directions for use, weeds controlled and geographic and/or other restrictions. Use in accordance with the nost restrictive of label limitations and precautions. Exceed no label dosages. Do not tank mix this product with any product containing a label prohibition against tank mixing with 2,4-D.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of this product with other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately ½ hour. If the mixture balls-up, forms flakes, sludges, jells, has oily films, layers or other precipitates, it is not compatible; do not use the tank mix combination.

**Mixing with Liquid Nitrogen Fertilizer:** This product may be combined with liquid nitrogen fertilizer suitable for foliar application to accomplish broadleaf weed control and fertilization of corn, small grains or pastures in a single operation. Use this product in accordance with recommendations for these crops provided in this label. Use liquid fertilizer at rates recommended by the supplier or extension service specialist. Test for mixing compatibility as described above before mixing in spray tank. A compatibility aid such as Unite or Compex may be needed in some situations. Compatibility is best with liquid fertilizer solutions containing only nitrogen. Mixing with N-P-K solutions may not be satisfactory, even with the addition of a compatibility aid. Pre-mixing 1 part this product with up to 4 parts water may help in situations when mixing difficulty occurs.

Fill the tank approximately half full with the liquid fertilizer, then add the required amount of this product with agitation. Maintain agitation and complete filling the tank with liquid fertilizer. Apply immediately and continue agitation in spray tank during application. **Do not store the spray mixture.** Application during very cold weather (near freezing) is not advisable.

Sprayer Clean-Out: To avoid injury to desirable plants, thoroughly clean equipment used to apply this product before reuse or applying other chemicals.

- 1. Thoroughly rinse and flush application equipment after use at least three times with water. Dispose of all rinse water by application to treatment area or apply to non-cropland area away from water supplies.
- 2. During the second rinse, add 1 gt of household ammonia for every 25 gallons of water. Circulate the solution through the entire system making sure all internal surfaces are contacted (15-20 min.). Let the solution stand for several hours, preferably overnight.
- 3. Flush the solution out of the spray tank through the boom.
- 4. Rinse the system twice with clean water, recirculating and draining each time.
- 5. Remove nozzles and screens and clean separately.
- 6. If equipment is to be used to apply another pesticide or agricultural chemical to a 2,4-D susceptible crop, additional steps may be required to remove all traces of 2,4-D, including cleaning of disassembled parts and replacement of hoses or other fittings that may contain absorbed 2,4-D.

Application: Apply with calibrated air or ground equipment using sufficient spray volume to provide adequate coverage of target weeds or as otherwise directed in specific use directions. For broadcast application, use a spray volume of 3 or more gallons per acre by air and 10 or more gallons per acre for ground equipment. Observe any state-specified minimum spray volumes. In general, increase spray volume as crop canopy, height and weed density increase to obtain adequate spray coverage. Do not apply less than 3 gallons total spray volume per acre.

tate Ranges and Application Timing: Generally, the lower dosages will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed. Apply this product during warm weather when weeds are young and actively growing.

#### Weeds Controlled Annual or Biennial Weeds

beggarticks\* bittercress, smallflowered bitterweed broomweed, common\* burcodk, common\* buttercup, smallflowered\* carpetweed cinquefoil, common cinquefoil, rough cocklebur, common coffeeweed copperleaf, Virginia croton, Texas croton, woolly flixweed galinsoga geranium, Carolina hemp, wild horseweed (marestail) iewelweed iimsonweed knotweed\*

kochia lambsquarters, common lettuce, prickly\* lettuce, wild lupines mallow, little\* mallow, Venice\* marshelder morningglory, annual morningglory, ivy morningglory, woolly mousetail mustards (except blue mustard) parsnip, wild pennycress, field pepperweed\* pigweeds (Amaranthus spp.) poorioe primrose, common purslane, common pusley, Florida radish, wild

ragweed, common ragweed, giant rape, wild rocket, yellow salsify, common\* salsify, western\* shepherdspurse sicklepod smartweed (annual species)\* sneezeweed, bitter sowthistle, annual sowthistle, spiny spanishneedles sunflower sweetclover tansymustard thistle, bull thistle, musk\* thistle, Russian (tumbleweed)\* velvetleaf vetches

#### alfalfa\* artichoke, Jerusalem\* aster, many-flower\* Austrian fieldcress\* bindweed, hedge\* bindweed, field\* bindweed, European\* blue lettuce blueweed, Texas

Perennial Weeds chicory clover, red\* coffeeweed cress, hoary\* dandelion\* docks\* dogbanes\* goldenrod eveningprimrose, cutleaf

ivy, ground\* Jerusalem-artichoke loco, bigbend nettles (including stinging)\* onion, wild\* pennywort plantains ragwort, tansy\* sowthistle, perennial

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broomweed bullnettle\* carrot, wild\* catnip garlic, wild\*
hawkweed, orange\*
healal
ironweed, western

thistle, Canada\* vervains\* waterplantain wormwood

\*These weeds are only partially controlled and may require repeat applications and/or use of higher recommended rates of this product even under ideal application conditions.

#### **Specific Use Directions**

#### **Aquatic Uses**

Use Requirements for Aquatic Areas: When this product is applied to aquatic areas, follow PPE and reentry instructions in the *Non-Agricultural Use Requirements* section of this label.

#### Control of Weeds and Brush on Banks of Irrigation Canals and Ditches

| Target Plants   | Gladeamine<br>(pt/acre) | Specific Use Directions   |
|---|-------------------------|---|
| Annual Weeds  | 2 to 4                  | Apply using low pressure spray (10 to 40 psi) in a spray volume of 20 to 100 gallons per acre using power operated  |
| Biennial and perennial broadleaf<br>weeds and susceptible woody<br>plants | 4                       | spray equipment. Apply when wind speed is low, 5 mph or less. Apply working upstream to avoid accidental concentration of spray into water. Cross-stream spraying to opposite banks is not permitted; avoid boom spraying over water surface. When spraying shoreline weeds, allow no more than a 2-foot overspray onto water surface with an average of less than 1 foot of overspray to prevent significant water contamination.  Apply when weeds are small and actively growing before the bud stage. Apply when biennial and perennial species are in the seedling to rosette stage and before flower stalks appear. For hard-to-control weeds, a repeat application after 30 days at the same rate may be needed.  For woody species and patches of perennial weeds, mix 1 gallon of this product per 64 to 150 gallons of total spray. Wet foliage by applying approximately 3 to 4 gallons of spray per 1000 sq ft (10.5 x 10.5 steps). |

#### **Restrictions and Limitations:**

- Do not apply more than 2 treatments per season or reapply within 30 days.
- Do not use on small canals (less than 10 cfs) where water will be used for drinking purposes.
- Do not apply more than 8.42 pt/acre (4 lb of acid equivalent) per use season.

#### **Aquatic Weed Control**

in Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches, Canals, Rivers and Streams that are Quiescent or Slow-Moving, Including Programs of the Tennessee Valley Authority (TVA)

#### **Notice to Applicators:**

Before application, coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

Emergent and Floating Aquatic Weeds: Including Water Hyacinth (Eichornia crassipe)

Application rate: 2 to 4 qt/acre.

Specific Use Directions:

Application timing: Spray only the weed mass. Apply when water hyacinth plants are actively growing. Repeat application as necessary to kill regrowth and plants missed in previous operation. Use 4 qt/acre rate when plants are mature or when weed mass is dense.

Surface application: Use power operated sprayers with boom or spray gun mounted on boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 100 to 400 gallons of spray mixture per acre. Use special

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precautions, such as use of low pressure, large nozzles and spray thickening agents, to avoid spray drift to susceptible crops. Follow label directions for use of any drift control agent.

Aerial application: Use drift control spray equipment or a thickening agent mixed in the spray mixture. Apply 1 gallon of this product per acre using standard boom systems using a minimum spray volume of 5 gallons per acre. For Microfoil® drift control spray systems, apply this product in a total spray volume of 12 to 15 gallons per acre.

#### Submerged Aquatic Weeds: Including Eurasian Water Milfoil (Myriophyllum spicatum)

| Aquatic Weed Control in Ponds, 2.84 gallons Ar   | Saulication Timings For boot regults, apply in against an  |
|--|--|
| Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches, Canals, Rivers and Streams that are Quiescent or Slow Moving, including Programs of the TVA  (10.8 lb of acid equivalent) per acre foot  A signary applications of the Streams that are Quiescent or Slow Moving, including Programs of the TVA  (10.8 lb of acid equivalent) per acre foot  A signary applications of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs of the Streams that are Quiescent or Slow Moving, including Programs that are Quiescent or Slow Movi | Application Timing: For best results, apply in spring or early summer when aquatic weeds appear. Check for weed growth in areas heavily infested the previous year. A second application may be needed when weeds show signs of recovery, but no later than mid-August in most areas.  Subsurface Application: Apply this product undiluted directly to the water through a boat-mounted distribution system. Treat shoreline areas, by subsurface injection application, by boat to avoid aerial drift.  Surface Application: Use power operated boat-mounted boom sprayer. If rate is less than 5 gallons per acre, dilute to a minimum spray volume of 5 gallons per surface acre.  Aerial Application: Use drift control spray equipment or nickening agents mixed with sprays to reduce drift. Apply through standard boom systems in a minimum spray volume of 5 gallons per surface acre. For dicrofoil® drift control spray systems, apply this product in a total spray volume of 12 to 15 gallons per acre. Apply to attain a concentration of 2 to 4 ppm (see table selow). |

<sup>\*</sup>Gladeamine contains 3.8 lb. of acid equivalent per gallon of product.

|              | Amount to Apply to Attain a Concentration of 2 to 4 ppm |   |  |  |  |
|--------------|---|---|--|--|--|
| Surface Area | Average Depth (ft)                                      | 2,4-D Acid Equivalent<br>to Apply (lb/acre) | Amount of Gladeamine to Apply (gal/acre) |  |  |
|              | 1   | 5.4 to 10.8                                 | 1.42 to 2.84                             |  |  |
|              | 2   | 10.8 to 21.6                                | 2.84 to 5.68                             |  |  |
| 1 acre       | 3   | 16.2 to 32.4                                | 4.26 to 8.53                             |  |  |
|              | 4   | 21.6 to 43.2                                | 5.68 to 11.37                            |  |  |
|              | 5   | 27 to 54                                    | 7.1 to 14.21                             |  |  |

#### Precautions and Restrictions for Aquatic Use:

- Do not treat areas that are not infested with aquatic weeds.
- Do not exceed 10.8 lb of acid equivalent (2.84 gal) per acre foot of treated water.
- Do not apply within 1500 ft of an active potable or irrigation water intake.
- Wind speed: Do not apply when wind speed is at or above 10 mph when making ground or surface applications. Do
  not aerially apply when wind speed is greater than 5 mph. Wind speed restrictions do not apply for subsurface
  applications used in submerged aquatic weed control programs.
- Dissolved oxygen ratio: Fish require oxygen dissolved in water for life processes and a favorable water-oxygen ratio must be maintained. Decaying weeds use up dissolved oxygen in water. Fish kill resulting from decaying plant material can be prevented by: (1) treating the entire area when the weed mass is sparse and the rate of decomposition will not be sufficient to disturb the water-oxygen ratio; or (2) if application is delayed until there is a dense weed mass, treat no more than one-half of a lake or pond at one time. For large bodies of weed-infested water, apply product in lanes, leaving buffer strips at least 100 feet wide that can be treated in 4 to 5 weeks or when vegetation in treated lanes has decomposed. During the growing season, decomposition of treated strips will usually occur in 2 to 3 weeks.

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• Irrigation: Unless an approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) acid or less, do not use water from treated areas for (1) irrigation other than non-crop areas or those crops or plants labeled for direct application of 2,4-D, or (2) mixing sprays for agricultural or ornamental plants.

• **Potable water:** Unless an approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) acid or less, do not use water from treated areas for potable (drinking) water.

 Other uses of treated water: Except as stated above, there are no restrictions on use of water from treated areas for fishing, watering of livestock or other domestic purposes.

## Cereal Grains (Wheat, Barley, Millet, Oats and Rye)

Agricultural Use Requirements for Crops: For the following crop uses, follow PPE and reentry instructions in the Agricultural Use Requirements section of this label.

| Crop/Application Timing  | Gladeamine<br>(pt/acre) | Specific Use Directions   |
|--|-------------------------|---|
| Spring post-emergence<br>(wheat, barley, millet, rye<br>(oats) | 2/3 to 1 1/3<br>½ to 1  | General: Apply when weeds are small and actively growing. Use the lower rate in the rate range for small, rapidly growing annual or biennial weeds and a higher rate for perennial weeds or for annual or   |
| Pre-harvest (dough stage) (all cereals)                        | 1                       | biennial weeds in advanced growth stages or when growing conditions are less than ideal.  Postemergence: Apply after crop begins to tiller, but before boot stage of growth (usually 4 to 8 inches tall).  Preharvest: Apply using air or ground equipment when crop is in dough stage or grain development to control or suppress weeds that might interfere with harvest. |

#### Precautions:

- Up to 2.5 pt/acre may be applied postemergence to wheat, barley, rye and millet. However, there is greater risk of crop injury at rates greater than 1 1/3 pt/acre; use such rates only when the need for weed control justifies additional crop risk.
- Do not apply this product at the crop seedling stage of growth prior to tillering or from early boot through milk stage of grain development. Consult state agricultural experiment station or extension service weed specialists for recommendations or suggestions to fit local conditions.
- Do not apply if crop is underseeded with legumes.

#### Restrictions:

- **Preharvest interval:** Do not harvest for grain for 14 days after application or allow grazing or harvest as forage within 7 days after application.
- Do not apply more than 3.68 pt/acre of this product (1.75 lb of acid equivalent) per use season.

## Corn (Field Corn, Popcorn and Sweet Corn)

| Application Timing/Stage of Growth                      | Gladeamine<br>(pt/acre) | Specific Use Directions   |
|---|-------------------------|---|
| Preplant (burndown) Preemergence (field, pop and sweet) | 1 to 2                  | General: Use a higher rate in the rate range for less susceptible weeds or cover crops, weeds in advanced stages of development or under less favorable growth conditions.  Preplant: Apply 7 to 14 days before planting corn to control emerged broadleaf weed seedlings or existing cover crops.  Preemergence: Apply any time after planting, but before corn emerges to control broadleaf weed seedlings or existing cover crops. |

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| Application Timing/Stage of Growth   | Gladeamine<br>(pt/acre) | Specific Use Directions  |
|--|-------------------------|--|
| Postemergence (field, pop and sweet) Annual broadleaf weeds                    |                         | Apply when weeds are small and corn is less than 8 inches tall (to top of canopy). If corn is more than 8                        |
| Crop up to 8 inches tall Crop 8 inches tall to tasseling (only directed spray) | ½ to 1<br>1             | inches tall use drop nozzles and directed sprays to keep spray off foliage.  Treat perennial weeds when they are in bud to bloom |
| Perennial broadleaf weeds  | 1                       | stage.  Do not apply from tasseling to hard dough stage.   |
| Preharvest (only field and pop)  | Up to 3                 | Apply after corn is in hard dough (or denting) stage.  Do not apply preharvest to sweet corn.                                    |

#### Precautions:

- Preplant or preemergence applications to light sandy soils is not recommended.
- Corn hybrids vary in tolerance to 2,4-D; some are easily injured. Apply only to varieties known to be 2,4-D tolerant.
   Consult the seed company of your agricultural experiment station or extension service weed specialist for this information.
- Note: Corn treated with 2,4-D may exhibit stem brittleness for 8 to 10 days following application. During this period, the crop is more susceptible to stem breakage from cultivation or wind.

#### Restrictions (field and popcorn):

- Preharvest Interval: Do not harvest for grain or fodder within 7 days after application.
- Do not apply more than 6.32 pt/acre of this product (3 lb of acid equivalent) per use season.

#### Restrictions (sweet corn):

- Preharvest interval: Do not harvest ears within 45 days after application.
- Do not make a postemergence application any less than 21 days after a prior application.
- Do not apply more than 3.16 pt. acre of this product (1.5 lb of acid equivalent) per use season.

#### Fallow Land and Crop Stubble

Fallow land is idle land, postharvest to crops or between crops.

| Type of Weeds                         | Gladeamine<br>(pt/acre) | Specific Use Directions  |
|---------------------------------------|-------------------------|--|
| Annual broadleaf weeds                | 1 to 2                  | Use a lower rate in the rate range when weeds are small (2 to 3 inches tall) and actively growing.  Use a higher rate in the range when weeds are larger and under less favorable growth conditions.   |
| Biennial broadleaf weeds              | 2 to 4                  | Apply when musk thistles or other biennial species are in the seedling to rosette stage and before development of flower stalks.  The lower rate may be used in the spring during the rosette stage. Use the highest rate in the fall or after flower stalks have developed. |
| Perennial broadleaf weeds             | 2 to 4                  | Apply when perennial weeds are in bud to early bloom stage or while in good vegetative growth.   |
| Wild garlic and onion in crop stubble | 4                       | Apply to new regrowth of wild garlic or onion that occurs in the fall after harvest of small grains, corn or grain sorghum.  |

Precaution: For best weed control results, do not cultivate for at least 2 weeks after application or until top growth is dead.

#### Restrictions:

- Preharvest interval: Do not cut forage for hay within 7 days of application.
- Do not apply within 30 days of a previous application.
- Do not apply more than 4.21 pt/acre of this product (2 lb of acid equivalent) per use season.

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#### **Planting in Treated Areas**

**Labeled crops:** Within 29 days after an application of this product, plant only those crops listed on this or other registered 2,4-D labels. Follow more stringent limitations, if any, provided in directions for specific crops. Labeled crops may be at risk of crop injury or loss if planted soon after application, especially during the first 14 days. Consider degradation factors described below in weighing this risk.

**Other crops:** All other crops may be planted 30 or more days after application without concern for illegal residues in the planted crop. However, under certain conditions, there may be a risk of injury to susceptible crops. Consider degradation factors described below in weighing this risk. Under normal conditions, any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed since application.

Degradation factors: When planting into treated areas, the risk of crop injury is less if lower rates of product were applied and conditions following application have included warm, moist soil conditions that favor rapid breakdown of 2,4-D. Risk is greater if higher product rates were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application. Consult your local agricultural extension service for information about susceptible crops and typical conditions in your area.

## Sorghum (Grain Sorghum (Milo) and Forage Sorghum)

| Application Timing/Stage of Growth   | Gladeamine<br>(pt/acre) | Specific Use Directions  |
|--|-------------------------|--|
| Postemergence Crop 6 to 8 inches tall Crop 8 to 15 inches tall (only directed spray) | ½ to 1<br>¾ to 1        | Apply when sorghum is 6 to 15 inches tall. If sorghum is more than 8 inches tall (to top of crop canopy) use drop nozzles and apply as a directed spray to keep spray off foliage. |

#### Precautions:

- Note: Expect temporary crop injury under conditions of high soil moisture and high air temperatures. If it is necessary to apply this product under these conditions, use no more than 2/3 pint per acre.
- Do not apply during boot, or later, stages of growth.
- Sorghum hybrids vary in tolerance to 2,4-D; some are easily injured. Apply only to varieties known to be 2,4-D tolerant. Consult the seed company, your agricultural experiment station or extension service weed specialist for this information.

#### Restrictions:

- Preharvest interval: Do not harvest grain for 30 days after application.
- Do not permit meat or dairy animals to consume treated crop as fodder or forage within 30 days after application.
- Do not apply more than 2.1 pt/acre of this product (1 lb of acid equivalent) per use season.

## Rice (This product is not approved for use on rice by the State of California)

| Application Timing | Gladeamine<br>(pt/acre) | Specific Use Directions   |
|--------------------|-------------------------|---|
| Preplant           | 1 to 2                  | Apply 2 to 4 weeks before planting rice to control emerged broadleaf weeds.   |
| Postemergence      | 1 to 2*                 | Apply when rice is in late tillering stage and at the time of first joint development (first to second green ring). |

<sup>\*</sup>Apply up to 3 pt/acre postemergence for difficult weed control situations. There is greater risk of crop injury, however, at rates greater than 2 pt/acre; use such rates only when the need for weed control justifies additional crop risk.

#### Precautions:

- Do not apply at early seedling stage or after rice internodes exceed one-half inch or panicle initiation.
- Some rice varieties under certain conditions or stages of growth may be injured by 2,4-D. Before applying, consult
  local university or agricultural extension service specialists regarding local treatment recommendations for various rice
  varieties.

#### **Restrictions:**

- Preharvest interval: Do not apply within 60 days of harvest.
- Do not apply more than 3.16 pt/acre of this product (1.5 lb of acid equivalent) per use season.

#### Sugarcane

| Application Timing/Stage of Growth | Gladeamine<br>(pt/acre) | Specific Use Directions   |
|------------------------------------|-------------------------|---|
| Preemergence                       | 2 to 4                  | General: Consult your agricultural experiment station or extension service weed specialist for local  |
| Postemeregence                     |                         | recommendations.  Preemergence: Apply to actively growing weeds before cane emerges.  Postemergence: Apply after cane emerges through canopy closure. Use higher rate for perennial weeds and difficult-to-control species. |

Restriction: Do not apply more than 8.42 pt/acre of this product (4 lb of acid equivalent) per use season.

#### Forestry, Rangeland, Established Pasture and Non-Cropland Uses

Agricultural Use Requirements for Forest Use (Except Tree Injection Use): For use in forests, follow PPE and reentry instructions in the Agricultural Use Requirements section of this label.

Agricultural Use Requirements for Rangeland, Pasture, Forest (Only Tree Injection) and Non-Cropland Areas: When this product is applied to rangeland and established pastures not harvested for hay or seed; non-cropland areas; and when applied by tree injection in forest sites, follow reentry requirements given in the *Non-Agricultural Use Requirements* section of this label.

# Forestry Uses Forest site preparation, forest roadsides, brush control, established conifer release (including Christmas trees and reforestation areas)

| Treatment Site Method of Application  | Gladeamine                                   | Specific Use Directions   |
|---|--|---|
| Annual weeds  | 2 to 4 pt/acre                               | Apply before the bud stage when weeds are small and actively growing. Apply when biennial and   |
| Biennial and perennial broadleaf weeds and susceptible woody plants   | 4 to 8 pt/acre                               | perennial species are in the seedling to rosette stage and before flower stalks appear. For difficult to control perennial broadleaf weeds and woody species, use up to 1 gal Gladeamine and 1 to 4 qt Garlon 3A herbicide per acre. For conifer release, make application in early spring before budbreak of conifers when weeds are small and actively growing.   |
| Conifer release: species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce and balsam fir | 1½ to 3 qt/acre                              | To control competing hardwood species, such as alder, aspen, birch, hazel and willow, apply from midto late-summer when growth of conifer trees has hardened off and woody plants are still actively growing. Apply with ground or air equipment, using sufficient spray volume to ensure complete coverage. Because this treatment may cause occasional conifer injury, do not apply if such injury cannot be tolerated. |
| Directed spray: conifer plantations including pine  | 4 qt/100 gal                                 | Apply when brush or weeds are actively growing by directing the spray to avoid contact with conifer foliage and injurious amounts of spray. Apply in oil, oil-water or water carrier in a spray volume of 10 to 100 gallons per acre.   |
| Basal spray (may also be used in rangeland, pasture and non-cropland)   | 8 qt/100 gal<br>or<br>2.6 fl oz/gal of water | Thoroughly wet the base and root collar of all stems until the spray begins to accumulate around the root collar at the ground line. Wetting stems with the mixture may also aid in control.  |

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| Treatment Site Method of Application  | Gladeamine                                   | Specific Use Directions   |
|---|--|---|
| Surface of cut stumps (may also be used in rangeland, pastures and non-cropland)      | 8 qt/100 gal<br>or<br>2.6 fl oz/gal of water | Apply as soon as possible after cutting trees. Thoroughly soak the entire stump with the 2,4-D mixture including cut surface, bark and exposed roots.   |
| Frill and girdle (may also be used in rangeland, pastures and non-cropland)           |  | Cut frills (overlapping "V"-shaped notches cut downward through the bark in a continuous ring around the base of the tree) using an axe or other suitable tool. Treat freshly cut frills with as much of the 2,4-D mixture as they will hold.   |
| Tree injection application (may also be used in rangeland, pastures and non-cropland) | 1 to 2 ml per<br>injection site              | To control unwanted hardwood trees, such as elm, hickory, oak and sweetgum, in forests and other non-crop areas apply by injecting at a rate of 1 ml of undiluted Gladeamine per inch of trunk diameter at breast height (DBH), measured approximately 4½ feet above the ground. Place injection site as close to the root collar as possible and ensure the injection bit penetrates the inner bark. Applications may be made throughout the year, but for best results apply between May 15 and October 15. Do not treat maples during the spring sap flow.  For hard to control species, such as ash, maple and dogwood, use 2 ml of undiluted Gladeamine per injection site or double the number of 1 ml injections.  Note: No WPS worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants. |

#### Precautions and Restrictions:

- Do not allow sprays to contact conifer shoot growth (current year's new growth) or injury may occur.
- Do not apply to nursery seed beds.
- For conifer release, do not use on plantations where pine or larch are among the desired species.
- For broadcast applications, do not apply more than 8.42 pt/acre of this product (4 lb of acid equivalent) per 12-month period.

#### Spot Treatments to Control Broadleaf Weeds

To prevent misapplication, apply spot treatments with a calibrated boom or hand-held sprayer using a fixed spray volume per 1000 sq ft as indicated below. **Note:** To control broadleaf weeds in small areas with a hand-held sprayer, use an application rate equivalent to the recommended broadcast rate and spray to thoroughly wet all foliage.

**Hand-Held Sprayers:** Hand-held sprayers may be used for spot applications of this product. Apply the spray uniformly at a rate equivalent to a broadcast application. Application rates in the table are based on the application rate for an area of 1000 sq ft. Mix the amount of Gladeamine (fl oz or ml) corresponding to the desired broadcast rate in 1 to 3 gallons of spray. To calculate the amount of Gladeamine required for larger areas, multiply the table value (fl oz or ml) by the thousands of sq ft to be treated. An area of 1000 sq ft is approximately 10.5 x 10.5 yards (strides) in size.

#### Rate Conversion Table for Spot Treatment

|            |           |           | Label Broadca  | st Rate (pt/acre | •)         |             |         |
|------------|-----------|-----------|----------------|------------------|------------|-------------|---------|
| 1/2        | 2/3       | 3/4       | 1              | 2                | 3          | 4           | 8       |
|            |           | Equivaler | it Amount of G | ladeamine per    | 1000 sq ft |             |         |
| 1/5 fl oz* | 1/4 fl oz | 1/3 fl oz | 3/8 fl oz      | 3/4 fl oz        | 1 fl oz    | 1 1/2 fl oz | 3 fl oz |
| (5.5 ml)   | (7.3 ml)  | (8.3 ml)  | (11 ml)        | (22 ml)          | (33 ml)    | (44 ml)     | (88 ml) |

\*Conversion factor: 1 fl oz = 39.6 (30) ml

Band Application: Gladeamine may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

| Band width in inches | v | Progdonat rate per pers   | = | Pand rate per treated sere   |
|----------------------|---|---------------------------|---|------------------------------|
| Row width in inches  | ^ | Broadcast rate per acre   | - | Band rate per treated acre   |
| Band width in inches | v | Progdozet volumo por goro | = | Rand volume per treated core |
| Row width in inches  | ^ | Broadcast volume per acre | - | Band volume per treated acre |

## Rangeland and Established Grass Pastures (Including Perennial Grasslands Not in Agricultural Production such as Conservation Reserve Program Acres)

| Target Weeds or Woody Plants   | Gladeamine<br>(pt/acre)                | Specific Use Directions  |
|--|--|--|
| Annual broadleaf weeds   | 2                                      | For best results, apply before the bud stage when  |
| Biennial and perennial broadleaf weeds   | 2 to 4                                 | weeds are small and actively growing. Apply when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks appear. Refer to the <i>Weeds Controlled</i> section for a listing of susceptible weed species and weeds that may be only partially controlled and require repeat applications and/or use of higher recommended rates, even under ideal conditions. |
| Spot treatment to control broadleaf weeds                                      | See <b>Spot Treatment</b> instructions | Note: To control broadleaf weeds in small areas with a hand-held sprayer, use an application rate equivalent to the broadcast rate recommended for this treatment site and spray to thoroughly wet all foliage. See rate conversion table, instructions and use of hand-held sprayers in Spot Treatment section of this label.   |
| Tree injection application   | Refer to tree injection a              | application instructions in the Forestry Uses section.   |
| Wild garlic and wild onion   | 4                                      | Make three applications (fall-spring-fall or spring-fall-spring) starting in late fall or early spring.  |
| Broadleaf weed control in newly sprigged coastal bermudagrass                  | 2 to 4                                 | Applications may be made either preemergence or postemergence. Follow Specific Use Directions for annual, biennial and perennial broadleaf weed control.   |
| Sand shinnery oak<br>Sand sagebrush  | 2                                      | Sand shinnery oak: Apply by aircraft between May 15 and June 15.  Sand sagebrush: Apply by ground or aircraft when foliage is fully expanded and plants are actively growing.  Use a 1:4 oil-water emulsion as a carrier and a spray volume of 3 to 5 gallons per acre.  |
| Big sagebrush<br>Rabbitbrush   | 4                                      | Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use a 1:4 oil-water emulsion as a carrier and a spray volume of 3 to 5 gallons per acre. Retreatment may be needed.  |
| Chamise, manzanita, buckbrush, coastal sage, coyotebrush and chaparral species | 4                                      | Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use water or 1:4 oil-water emulsion as a carrier and a spray volume of 5 to 10 gallons per acre. Retreatment may be needed.  |
| Southern wild rose   |  | Broadcast: Apply in a spray volume of 5 or more  |
| Broadcast application  | Up to 4                                | gallons per acre by aircraft or 10 or more gallons per acre by ground equipment.   |
| Spot treatment   | 1 gal/100 gal of spray                 | Spot treatment: Apply when foliage is well developed. Thorough coverage is required. Use 1   |

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| gallon of Gladeamine plus 4 to 8 fl oz of an          |
| agricultural surfactant per 100 gallons of water. Two |
| or more treatments may be required.                   |
| Do not exceed 4 pt per acre per application.          |

#### Precautions and Restrictions:

- Do not use on bentgrass, alfalfa, clover or other legumes.
- · Do not use on newly seeded areas until grass is well established.
- Do not use from early boot to milk stage where grass seed production is desired.
- Do not apply within 30 days of a previous application.
- Do not harvest forage for hay within 7 days of application.
- For grazed areas, the maximum use rate is 4.21 pt/acre of Gladeamine (2 lb of acid equivalent) per application.
- Do not apply more than 8.42 pt/acre of Gladeamine (4 lb of acid equivalent) per use season.

# Non-Cropland Areas Such as fencerows, hedgerows, roadsides, drainage ditches, rights-of-way, utility power lines, railroads, airports and other non-crop areas

|   | Gladeamine                             |   |
|---|--|---|
| Treatment Site Method of Application                                | (pt/acre)                              | Specific Use Directions   |
| Annual broadleaf weeds  | 2 to 4                                 | Apply before the bud stage when annual weeds are small and actively growing. Biennial and perennial   |
| Biennial and perennial broadleaf weeds and susceptible woody plants | 4 to 8                                 | weeds should be rosette to bud stage, but not flowering, at the time of application. For difficult to control perennial broadleaf weeds and woody species, tank mix up to 1 gallon Gladeamine plus 1 to 4 qt Garlon 3A herbicide per acre.  For ground application (high volume): Apply a total of 100 to 400 gal per acre; (low volume): Apply a total of 10 to 100 gal per acre.  For helicopter: Apply a total of 5 to 30 gal per acre spray volume. |
| Spot treatment to control broadleaf weeds                           | See <b>Spot Treatment</b> instructions | Note: To control broadleaf weeds in small areas with a hand-held sprayer, use an application rate equivalent to the broadcast rate recommended for this treatment site and spray to thoroughly wet all foliage. See rate conversation table, instructions and use of hand-held sprayers in <i>Spot Treatment</i> section.   |
| Tree injection application  | See tree injection appli               | cation instructions in Forestry Uses section.   |
| Southern wild rose  |  | Broadcast: Apply in a spray volume of 5 or more   |
| Broadcast application   | Up to 4                                | gallons per acre by aircraft or 10 or more gallons per acre by ground equipment.  |
| Spot treatment  | 1 gai/100 gai of spray                 | Apply when foliage is well developed. Thorough coverage is required. Use 1 gallon Gladeamine plus 4 to 8 fl oz of an agricultural surfactant per 100 gallons of water. Two or more treatments may be required.  |

#### Precautions and Restrictions:

- Do not apply to newly seeded areas until grass is well established.
- Bentgrass, St. Augustine, clover, legumes and dichondra may be severely injured or killed by this treatment.
- Do not apply more than 8.42 pt/acre of Gladeamine (4 lb of acid equivalent) per use season.
- Do not reapply to a treated area within 30 days of a previous application.
- If grazing of meat or dairy animals or hay harvest is desired in non-crop areas, do not apply more than 4.21 pt/acre of Gladeamine (2 lb or acid equivalent) and do not harvest forage for hay within 7 days of application.

#### Turf Uses Grasses Grown for Seed or Sod Farms

Agricultural Use Requirements: When used in grass grown for seed or sod farms, follow PPE and reentry instructions in the Agricultural Use Requirements section of this label.

| Treatment Site (Application Timing)       | Gladeamine<br>(pt/acre) | Specific Use Directions                               |
|---|-------------------------|---|
| Grasses grown for seed (postemergence     |                         | Apply when weeds are small and actively growing.      |
| use)                                      |                         | For best results, apply when soil moisture is         |
| Seedling grass (five-leaf stage or later) | ¾ to 1                  | adequate for active weed growth.                      |
|   |                         | Do not apply to newly seeded grasses until well       |
| Well-established grasses                  | 1 to 4                  | established (five-leaf stage or later) and then use a |
| Sod farms (postemergence)                 | 2 to 4                  | maximum of 1 pt/acre. Cool season grasses are         |
|   |                         | tolerant of higher rates.                             |
|   |                         | Do not apply to grass in the early boot through       |
|   |                         | milk stage if seed production is desired.             |
| Ì   |                         | When grass is well established, higher rates of up to |
|   |                         | 4 pt/acre may be applied for control of hard-to-kill  |
|   |                         | annual or perennial weeds.                            |
|   |                         | Deep-rooted perennials such as bindweed and           |
|   |                         | Canada thistle may require repeat applications.       |
|   |                         | Avoid mowing sod farms for 1 to 2 days before or      |
|   |                         | after application.                                    |
|   |                         | Delay irrigation until the day following application. |

#### **Precautions and Restrictions:**

- Do not use on creeping grasses such as bent except as a spot treatment.
- Do not use on injury-sensitive southern grasses such as St. Augustinegrass.
- Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed.
- Do not reapply to a treated area within 21 days of a previous application.
- Reseeding: Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall application, reseed in the spring.
- Do not graze or cut forage for hay within 7 days after application.
- Do not apply more than 8.42 pt/acre of Gladeamine (4 lb of acid equivalent) per use season.

## Ornamental Turf (Excluding Grasses Grown for Seed or Sod Farms)

Including lawns, golf courses, cemeteries, parks, airfields, roadsides, vacant lots and drainage ditch banks

**Use Requirements for Ornamental Turf Areas:** When this product is applied to ornamental turf areas, follow PPE and reentry instructions in the *Non-Agricultural Use Requirements* section of this label.

| Treatment Site (Application Timing)                                       | Gladeamine<br>(pt/acre) | Specific Use Directions   |
|---|-------------------------|---|
| Ornamental Turf (postemergence) Seedling grass (five-leaf stage or later) | 3/4 to 1                | Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth.   |
| Well-established grasses  | 2 to 4                  | Deep-rooted perennial weeds such as bindweed and Canada thistle may require repeat applications.  |
| Biennial and perennial broadleaf<br>weeds                                 | 4                       | Do not apply to newly seeded grasses until well established (five-leaf stage or later) and then use a maximum of 1 pt/acre. Cool season grasses are tolerant of higher rates. |

#### Precautions and Restrictions:

- Do not use on creeping grasses such as bent except as a spot treatment.
- Do not use on injury-sensitive southern grasses such as St. Augustinegrass.
- Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed.

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Do not reapply within 21 days of a previous application.

Reseeding: Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall application, reseed in the spring.

Do not apply more than 2 broadcast applications per year per treatment site (does not include spot treatments)

#### Storage and Disposal

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

Pesticide Storage: Keep container tightly closed when not in use. If exposed to subfreezing temperatures, warm the product to at least 40°F and thoroughly mix before using. Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance. Container Disposal: {Metal:} Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. {Plastic Containers 5 Gallon or Less: Triple rinse (or equivalent), then 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. General: Consult Federal, state or local authorities for approval of alternate procedures.

#### Warranty Disclaimer

Blades Formulating Corp. warrants that this product conforms to the chemical description on the label and is reasonably rit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Glades Formulating Corp. makes no other express or implied warranty of merchantability or fitness for a particular purpose or any other express or implied warranty.

#### Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Glades Formulating Corp. or the seller. All such risks shall be assumed by the buyer.

#### Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability or other legal theories) shall be limited to, at Glades Formulating Corp.'s election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

Glades Formulating Corp. shall not be liable for losses or damages resulting from handling or use of this product unless Glades Formulating Corp. is promptly notified of such loss or damage in writing. In no case shall Glades Formulating Corp. be liable for consequential or incidental damages or losses. The terms of the Warranty Disclaimer and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Glades Formulating Corp. or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

| L | Denotes optional/alternate verblage                       |
|---|---|
| ( | Denotes language that does not appear on the market label |