

524-535

10/31/2001

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7102)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

524-535

Date of Issuance:

OCT 31 2001

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

MON 78365 Herbicide

Name and Address of Registrant (include ZIP Code):

Monsanto Company
600 13th Street, N.W. Suite 660
Washington, DC 20005

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with section 3(c)(7)(A) and (B) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provided that you:

1. Submit the storage stability and corrosion characteristics study when completed.
2. Submit/cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment.
 - a. Add the phrase "EPA Registration No. 524-535".
 - b. On page 6 delete the following paragraphs:
 1. Environmental Fate
 2. Volatility
 3. Toxicology Testing
 - c. Under "Personal Protective Equipment" add the following statement.

-Some materials that are chemical-resistant to this product are listed below. If you want more options, follow restrictions for Category A on an EPA Chemical Resistant category selection chart.--

Signature of Approving Official:

Date:

10-31-01

d. Under Personal Protective Equipment "waterproof gloves" must be changed to read "Chemical resistant gloves Category A such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber \geq 14 mils"

e. A 24 Hour REI must be incorporated into the Non-Agricultural Use Requirements box.

3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec.6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

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MON 78365

Herbicide by Monsanto

Complete Directions for Use

EPA Reg. No. 524-???

LCL

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

MON 78365, Monsanto and the Vine symbol are trademarks of Monsanto Company.

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Read the entire label before using this product.

Use only according to label instructions.

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

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING.

Container Label Statements:

Refillable container:

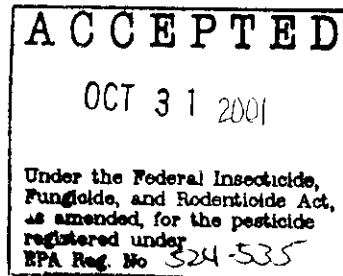
THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. IT IS INTENDED THAT REPACKAGING BE ONLY IN ACCORDANCE WITH A MONSANTO REPACKAGING OR TOLL REPACKAGING AGREEMENT.

Non-refillable container:

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING.

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1.0 INGREDIENTS

ACTIVE INGREDIENT:

*Glyphosate, N-(phosphonomethyl)
glycine, in the form of its ammonium salt..... 73.3%

Diquat dibromide [6,7-dihydrodipyrido
(1,2-a:2',1'-c) pyrazinediium dibromide] 2.9%

OTHER INGREDIENTS:..... 23.8%
100.0%

* Equivalent to 66.6% of the acid, glyphosate

1.0 pound of MON 78365 herbicide contains 0.73 pounds of the ammonium salt of glyphosate and 0.03 pounds of the dibromide salt of diquat.

2.0 IMPORTANT PHONE NUMBERS

1. FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT,
CALL TOLL-FREE,

1-800-332-3111

2. IN CASE OF AN EMERGENCY INVOLVING THIS PRODUCT, OR FOR MEDICAL
ASSISTANCE, CALL COLLECT, DAY OR NIGHT,

(314)-694-4000

3.0 PRECAUTIONARY STATEMENTS

3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children.

CAUTION!

HARMFUL IF SWALLOWED

HARMFUL IF INHALED

CAUSES MODERATE EYE IRRITATION

- Avoid breathing dust or spray mist.
- Avoid contact with eyes or clothing.
- Remove contaminated clothing and wash clothing before reuse.
- Wash thoroughly with soap and water after handling.

FIRST AID	
If Swallowed	<ul style="list-style-type: none"> • Call a physician or Poison Control Center 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 physician. • Do not give anything by mouth to an unconscious person. • QUICK TREATMENT IS ESSENTIAL TO COUNTERACT POISONING and should be initiated before signs and symptoms of injury appear.
If inhaled	<ul style="list-style-type: none"> • 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 physician for further treatment advice.
If In Eyes	<ul style="list-style-type: none"> • 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 physician for treatment advice.
<p>Have the product container or label with you when calling a poison control center or physician, or going for treatment. This product is identified as MON 78365 Herbicide, EPA Registration No. 524-???. You may also contact (314) 694-9000, collect day or night, for emergency medical treatment information.</p>	

DOMESTIC ANIMALS: Keep livestock and pets out of treated areas. Do not graze livestock on treated areas. This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: Coveralls over short-sleeved shirt and short pants or coveralls over long-sleeved shirt and long pants, waterproof gloves, chemical-resistant footwear plus socks, protective eyewear, chemical resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing or loading. Discard clothing and other materials that have been heavily contaminated with this product's concentrate. 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.

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.
• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

3.2 Environmental Hazards

This product is toxic to aquatic invertebrates. 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.

3.3 Physical or Chemical Hazards

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

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.
Keep all unprotected persons out of operating areas or vicinity where there may be drift. Do not enter or allow entry of maintenance workers into treated areas, or allow contact with treated vegetation wet with spray solution, dew or rain, without appropriate protective clothing until spray has dried, and to prevent transfer of this product onto desirable vegetation.

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4.0 STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.
Keep container closed to prevent spills and contamination.
See container label for STORAGE AND DISPOSAL instructions.

Container Label Statements:

(ALL CONTAINERS)

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

(FOR REFILLABLE PORTABLE CONTAINERS)

Do not reuse this container except for refill in accordance with a valid Monsanto Repackaging or Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(FOR BULK CONTAINERS)

Triple rinse emptied bulk container. Then offer for recycling or reconditioning, or dispose of in a manner approved by state and local authorities.

(FOR PLASTIC 1-WAY CONTAINERS & BOTTLES)

Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

5.0 GENERAL INFORMATION (HOW THIS PRODUCT WORKS)

Product Description: This product is a postemergent, systemic herbicide with no soil residual activity. It is generally non-selective and gives broad spectrum control of many annual weeds, perennial weeds, woody brush and trees. It is formulated as a water-soluble granule containing surfactant and no additional surfactant is needed or recommended. It may be applied through most standard sprayers after dissolution and thorough mixing with water according to label instructions.

Time to Symptoms: This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 1 day, and on most perennial weeds in 2 days. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a quick yellowing of the foliage which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Mode of Action: One of the active ingredients in this product inhibits an enzyme found only in plants and microorganisms that is essential to formation of specific amino acids. A second active rapidly disrupts cell integrity of photosynthetically active tissues in the contacted foliage.

Cultural Considerations: Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfastness: Heavy rainfall soon after application may wash this product off of the foliage and a repeat application may be required for adequate control.

Spray Coverage: For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

No Soil Activity: Weeds must be emerged at the time of application to be controlled by this product. Weeds germinating from seed after application will not be controlled. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide and will continue to grow.

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Environmental Fate: When this product comes in contact with soil, it is bound to soil particles and organic matter. Under recommended use situations, once this product is bound to soil particles and organic matter, it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treated area or if the soil is transported off-site. The strong affinity of this product to soil particles and organic matter prevents this product from leaching out of the soil profile and entering ground water. The affinity between this product and soil particles remains until this product is degraded.

Volatility: MON 78365 herbicide is non-volatile. Therefore, it cannot move as a vapor after application to affect nearby vegetation.

Toxicology Testing: Exposure to workers and other applicators generally is expected to pose minimal risks based on results of short-term toxicity studies. Glyphosate has been thoroughly tested and determined not to cause cancer or other adverse long-term health effects.

Tank Mixing: This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive label directions for each product in the mixture.

Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly recommended in this labeling. Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance.

Annual Maximum Use Rate: For noncrop uses, the combined total of all treatments must not exceed 12.25 pounds of this product per acre per year.

ATTENTION

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. **AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.**

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

6.0 MIXING

Clean sprayer parts immediately after using this product by thoroughly flushing with water.

NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS VISIBLY MUDDY WATER OR WATER FROM PONDS AND DITCHES THAT IS NOT CLEAR.

Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

6.1 Procedure For Preparing Spray Solution

Use the following procedure to mix this product in water alone or when preparing tank mixtures with other labeled products. .

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. Add MON 78365 herbicide using a circular motion while pouring.
4. If second product is a wettable powder, first make a slurry with the water carrier, then add the slurry SLOWLY through the screen into the tank. Continue agitation.
5. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
6. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
7. Continue filling the spray tank with water and add water soluble liquids near the end of the filling process.

When tank mixing MON 78365 herbicide with other products, maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance.

Refer to the "TANK MIXING" section of "GENERAL INFORMATION" for additional precautions.

6.2 Mixing for Hand-held Sprayers

Prepare the desired volume of spray solution by adding the desired amount of this product as shown in the following table to a clean, empty sprayer. Add the appropriate amount of water and stir or agitate to ensure dissolution of MON 78365 herbicide: For use in backpack sprayers, it is suggested that the recommended amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution.

Spray Solution

Desired Volume	Amount of MON 78365 herbicide				
	Annuals	Perennials	Brush	Low Volume, Directed	
1 Gal	1.2 oz	1.5 oz	1.5 oz	4.0 oz	8.0 oz
3 Gal	3.6 oz	4.5 oz	4.5 oz	12.0 oz	1.5 lb
10 Gal	12.0 oz	15.0 oz	15.0 oz	2.5 lb	5.0 lb

6.3 Colorants or Dyes

Agriculturally-approved colorants or marking dyes may be added to this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilution. Use colorants or dyes according to the manufacturer's recommendations. Certain blue dyes are not stable in the spray solution in the presence of this product. A jar test to determine if the desired blue dye is stable is recommended. If stability is a problem consider switching to an alternate color dye.

6.4 Drift Control Additives

Drift control additives may be used with all equipment types. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

7.0 APPLICATION EQUIPMENT AND TECHNIQUES

SPRAY DRIFT MANAGEMENT

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The

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applicator and the grower are is responsible for considering all these factors when making decisions.

Do not apply this product by air.

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

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended.

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES.

7.1 Ground Broadcast Equipment

Use the recommended rates of this product in 10 to 80 gallons of water per acre as a broadcast spray unless otherwise specified. As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

7.2 Hand-Held and High-Volume Equipment

Apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff. Use coarse sprays only.

For control of weeds listed in the "ANNUAL WEEDS" section of "WEEDS CONTROLLED", apply a 1.2 ounces of this product per 1 gallon of spray solution. See table in hand held mixing section for larger mixing volumes.

For best results, use 1.5 ounces of this product per 1 gallon of spray solution on harder-to-control perennials, such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle. See table in hand held mixing section for larger mixing volumes.

For low volume directed spray applications, use 4.0 to 8.0 ounces of this product per 1 gallon of spray solution for control or partial control of brush weeds. See table in hand held mixing section for larger mixing volumes. Spray coverage should be uniform with at least 50 percent of the foliage contacted. Coverage of the top one half of the plant is important for best results. To ensure adequate spray coverage, spray both sides of brush and tree seedlings when foliage is thick and dense, or where there are multiple sprouts.

7.3 CDA Equipment

The rate of this product applied per acre by controlled droplet application (CDA) equipment must not be less than the amount recommended in this label when applied by conventional broadcast equipment. For vehicle mounted CDA equipment, apply 3-15 gallons of water per acre.

For hand-held CDA units, apply a solution of 1.5 to 2 pounds of this product in one gallon of water at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mph.

CDA equipment produces a spray pattern which is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction is likely to result.

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8.0 SITE AND USE RECOMMENDATIONS

Detailed instructions follow alphabetically, by site.

Unless otherwise specified, applications may be made to control any weeds listed in the annual, perennial and woody brush tables.

8.1 General Noncrop Areas and Industrial Sites

Use in non-crop and non-timber areas only, such as airports, apartment complexes, ditch banks, dry ditches, dry canals, fencerows, golf courses, lumberyards, manufacturing sites, office complexes, parks, parking areas, recreational areas, residential areas, schools, storage areas, warehouse areas, other public areas, and similar industrial and noncrop sites.

This product is **not** for use on crops, timber, or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

General weed control, Trim-and-edge and Bare ground

This product may be used in general noncrop areas. It may be applied with any application equipment described in this label. This product may be used to trim-and-edge around objects in noncrop sites, for spot treatment of unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting an area to ornamentals, flowers, turfgrass (sod or seed), or prior to laying asphalt or beginning construction projects. This product is **not** for use on plants grown for sale or other commercial use, or for commercial seed production.

Repeated applications of this product may be used, as weeds emerge, to maintain bare ground.

This product may be tank mixed with the following products. Refer to these products' labels for approved noncrop sites and application rates.

BANVEL	PENDULUM WDG
BARRICADE™ 65WG	RONSTAR™ 50WP
DIMENSION™ 4 EC	SURFLAN™
ENDURANCE™	2,4-D
MANAGE®	
PENDIMETHALIN	
PENDULUM™ 3.3 EC	

When applied as a tank mixture for bare ground, MON 78365 herbicide provides control of the emerged annual weeds and control or partial control of emerged perennial weeds.

Dormant turfgrass

This product may be used to control or suppress many winter annual weeds and tall fescue for effective release of dormant bermudagrass and bahiagrass turf. Treat only when turf is dormant and prior to spring greenup. This product is **not** for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

Apply 5 to 16 ounces of this product per acre. Apply the recommended rates in 10 to 80 gallons of water per acre. Use only in areas where bermudagrass or bahiagrass are desirable ground covers and where some temporary injury or discoloration can be tolerated.

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Treatments in excess of 9 ounces per acre may result in injury or delayed greenup in highly maintained areas, such as golf courses and lawns.

Turfgrass renovation (Except for Commercial Sod Farms)

This product controls most existing vegetation prior to renovating turfgrass areas. This product is not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes. For maximum control of existing vegetation, delay planting or sodding to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. **Do not** use this product for renovation of bermudagrass or kikuyugrass sods. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.

Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow translocation into underground plant parts.

Desirable turfgrasses may be planted following the above procedures.

Hand-held equipment may be used for spot treatment of unwanted vegetation growing in existing turfgrass.

Do not feed or graze treated turfgrass or feed treated thatch to livestock.

8.2 Parks, Recreational and Residential Areas

This product may be used in parks, recreational and residential areas. It may be applied with any application equipment described in this label. This product may be used to trim-and-edge around trees, fences, paths, around buildings, sidewalks, and other objects in these areas. This product may be used for spot treatment of unwanted vegetation. This product may be used to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting an area to ornamentals, flowers, turfgrass (sod or seed), or prior to laying asphalt or beginning construction projects.

All of the instructions in the "GENERAL NONCROP AREAS AND INDUSTRIAL SITES" section apply to park and recreational areas. This product is not for use around plants being grown for sale or other commercial use.

9.0 WEEDS CONTROLLED

Always use the higher rate of this product per acre within the recommended range when weed growth is heavy or dense or weeds are growing in an undisturbed (noncultivated) area.

Reduced results may occur when treating weeds heavily covered with dust. For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment.

Refer to the following label sections for recommended rates for the control of annual and perennial weeds. For difficult to control perennial weeds and where plants are growing under stressed conditions, or where infestations are dense, this product may be used at up to 12.25 pounds per acre for enhanced results.

9.1 Annual Weeds

Use 4.5 pounds per acre of this product as a broadcast spray to control annual weeds.

For spray-to-wet applications, apply a 1.2 ounces of this product per 1 gallon of spray solution.

WEED SPECIES

Annoda, spurred
 Barley*
 Barnyardgrass*
 Bittercress*
 Black nightshade*
 Bluegrass, annual*
 Bluegrass, bulbous*
 Bassia, fivehook
 Brome, downy*
 Brome, Japanese*
 Browntop panicum*
 Buttercup*
 Carolina foxtail*
 Carolina geranium
 Castor bean
 Cheatgrass*
 Cheeseweed (*Malva parviflora*)
 Chervil*
 Chickweed*
 Cocklebur*
 Copperleaf, hophornbeam
 Corn*
 Corn speedwell*
 Crabgrass*
 Dwarf dandelion*
 Eastern manna grass*
 Eclipta*
 Fall panicum*
 Falsedandelion*
 Falseflax, smallseed*
 Fiddleneck
 Field pennycress*
 Filaree
 Fleabane, annual*
 Fleabane, hairy (*Conyza bonariensis*)*
 Fleabane, rough*
 Florida pusley
 Foxtail*
 Goatgrass, jointed*
 Goosegrass
 Grain sorghum (milo)*
 Groundsel, common*
 Hemp sesbania
 Henbit
 Horseweed/Marestail (*Conyza canadensis*)
 Itchgrass*
 Johnson grass, seedling
 Junglerice
 Knotweed
 Kochia
 Lambsquarters*
 Little barley*

London rocket*
 Mayweed
 Medusahead*
 Morningglory (*Ipomoea spp.*)
 Mustard, blue*
 Mustard, tansy*
 Mustard, tumble*
 Mustard, wild*
 Oats
 Pigweed*
 Plains/Tickseed coreopsis*
 Prickly lettuce*
 Purslane, common
 Ragweed, common*
 Ragweed, giant
 Red rice
 Russian thistle
 Rye*
 Ryegrass*
 Sandbur, field*
 Shattercane*
 Shepherd's-purse*
 Sicklepod
 Signalgrass, broadleaf*
 Smartweed, ladythumb*
 Smartweed, Pennsylvania*
 Sowthistle, annual
 Spanishneedles
 Speedwell, purslane*
 Sprangletop*
 Spurge, annual
 Spurge, prostrate*
 Spurge, spotted*
 Spurry, umbrella*
 Starthistle, yellow
 Stinkgrass*
 Sunflower*
 Teaweed/ Prickly sida
 Texas panicum*
 Velvetleaf
 Virginia copperleaf
 Virginia pepperweed*
 Wheat*
 Wild oats*
 Witchgrass*
 Woolly cupgrass*
 Yellow rocket

*When using field broadcast equipment (boom sprayers using flat fan nozzles) these species will be controlled or partially controlled using 4.5 pound of this product per acre. Applications must be made using 10 to 80 gallons of carrier volume per acre. Use nozzles that ensure thorough coverage of foliage and treat when weeds are in an early growth stage.

9.2 Perennial Weeds

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Best results are obtained when perennial weeds are treated after they reach the reproductive stage of growth (seedhead initiation in grasses and bud formation in broadleaves). For non-flowering plants, best results are obtained when the plants reach a mature stage of growth. In many situations, treatments are required prior to these growth stages. Under these conditions, use the higher application rate within the recommended range.

Use 9.0 pounds per acre of this product as a broadcast spray to control perennial weeds.

For spray-to-wet applications, apply a 1.5 ounces of this product per 1 gallon of spray solution. Ensure thorough coverage when using spray-to-wet treatments using hand-held equipment.

When using hand-held equipment for low volume directed spot treatments, apply a 4.0 to 8.0 ounces of this product per 1 gallon of spray solution.

Allow 7 or more days after application before tillage.

Weed Species

- Alfalfa*
- Alligatorweed*
- Anise (fennel)
- Bahiagrass
- Beachgrass, European (Ammophila arenaria)
- Bentgrass*
- Bermudagrass*
- Bermudagrass, water (knotgrass)
- Bindweed, field
- Bluegrass, Kentucky
- Blueweed, Texas
- Bromegrass, smooth
- Bursage, woolly-leaf
- Canarygrass, reed
- Cattail
- Clover; red, white*
- Cogongrass
- Dallisgrass
- Dandelion
- Dock, curly
- Dogbane, hemp
- Fescue (except tall)
- Fescue, tall
- German ivy
- Guineagrass
- Horsenettle
- Horseradish
- Iceplant
- Jerusalem artichoke
- Johnsongrass
- Kikuyugrass*
- Knapweed
- Lantana
- Lespedeza
- Milkweed, common

Muhly, wirestem
 Mullein, common
 Napiergrass
 Nightshade, silverleaf
 Nutsedge; purple, yellow
 Orchardgrass
 Pampasgrass
 Paragrass
 Pepperweed, perennial
 Phragmites*
 Poison hemlock
 Quackgrass
 Redvine*
 Reed, giant
 Ryegrass, perennial
 Spurge, leafy*
 Thistle, artichoke
 Thistle, Canada
 Timothy
 Torpedograss*
 Trumpetcreeper*
 Vaseygrass
 Veivetgrass
 Wheatgrass, western

*Partial control

9.3 Brush Weeds and Tree Seedlings

Best results are obtained when brushweeds are treated when they are in the seedling stage of growth. In many situations, re-treatment is required on larger plants. Under these conditions, use the higher application rate within the recommended range.

Use 9.0 pounds per acre of this product as a broadcast spray to control brush weeds.

For spray-to-wet applications, apply a 1.5 ounces of this product per 1 gallon of spray solution. Ensure thorough coverage when using spray-to-wet treatments using hand-held equipment.

When using hand-held equipment for low volume directed spot treatments, apply a 4.0 to 8.0 ounces of this product per 1 gallon of spray solution.

Allow 7 or more days after application before tillage.

Weed Species

Alder
 Ash*
 Beech*
 Birch
 Blackberry
 Blackgum
 Cherry; bitter, black, pin
 Dogwood*
 Elderberry
 Elm*

- Honeysuckle
- Locust, black*
- Maple, red
- Maple, sugar
- Oak; black, white*
- Oak, post
- Oak; northern, pin
- Oak, Scrub*
- Oak; southern red
- Peppertree, Brazilian (Florida holly)*
- Pine
- Poison ivy*
- Poison oak*
- Poplar, yellow*
- Redbud, eastern
- Rose, multiflora
- Saltcedar*
- Sumac; laurel, poison, smooth, sugarbush,winged*
- Sweetgum
- Vine maple*
- Virginia creeper
- Waxmyrtle, southern*

* Partial Control

10.0 LIMIT OF WARRANTY AND LIABILITY

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