

GROUP B-2 | O-4 HERBICIDE



Celsius® WG

HERBICIDE

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.)

For PRODUCT USE Information Call 1-800-331-2867
For MEDICAL and TRANSPORTATION Emergencies ONLY Call
24 Hours A Day 1-800-334-7577

BACKED
by BAYER™

Net Contents

10 Oz (283.5 Gr)

79714858

US81769664B 120418AV4

Bayer

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709
Product of Germany

A Herbicide for Control of Annual and Perennial Broadleaf Weeds and Grasses in Warm-Season Turf Types (St. Augustinegrass, Bermudagrass, Centipedegrass, Zoysiagrass,) listed in this label in Commercial and Residential Sites*

ACTIVE INGREDIENTS: Thiencarbazone-methyl (CAS Number 317815-83-1) 8.7%
Iodosulfuron-methyl-sodium (CAS Number 144550-36-7) 1.9%
Dicamba (CAS Number 1918-00-9) 57.4%
OTHER INGREDIENTS: 32.0%

TOTAL: 100.0%

*Do not use on bahiagrass, seashore paspalum or cool-season turf types, including tall fescue, fine fescue, Kentucky bluegrass, perennial ryegrass, or creeping bentgrass.

EPA Reg. No. 432-1507 EPA Est. No. 264-DEU-001

STOP - READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN
CAUTION

Herbicide

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TOTAL: 100.0%

Celcius® WG Herbicide is formulated as a 68% water dispersible granule
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FIRST AID

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. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anyone a glass of water or drink to swallow. • Do not give anything by mouth to an unconscious person.
For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

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10 Ounces (283.5 Grams)
79714858
US81769664B 120418AV4

BACKED
by **BAYER**TM

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PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco, chewing gum, or using the toilet.

ENVIRONMENTAL HAZARDS

This product is toxic to non-target plants. Non-target plants may be adversely affected if the product is allowed to drift from the areas of application. Avoid spray drift from treated area. Do not apply when conditions favor drift from treated areas. 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 cleaning equipment or disposing of equipment washwaters or rinsate. Do not drain or rinse equipment near desirable vegetation. Refer to the Spray Drift Management section of this label for additional information. This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having "high potential for reaching surface water and posing a threat to human and animal health." Do not apply this product to areas where surface water is present or to areas where runoff may occur, to which this product may pose a potential adverse effect on water quality. Do not apply this product to areas where runoff may occur, to which this product may pose a potential adverse effect on water quality. Do not apply this product to areas where runoff may occur, to which this product may pose a potential adverse effect on water quality. Reduced application rates will reduce the potential leaching of this herbicide from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near extreme heat or open flame.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. After recapping, allow for reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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STORAGE AND DISPOSAL (continued)

emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

PRODUCT INFORMATION

PRODUCT USES

CELSIUS® WG HERBICIDE is a selective herbicide with multiple modes of action that provide a broad spectrum of weed control. CELSIUS WG HERBICIDE controls weeds after they have germinated (post) and also has some residual activity that prevents new weed germination, depending on the specific weed.

CELSIUS WG HERBICIDE is intended for foliar application by licensed commercial applicators to established turf including residential lawns, commercial lawns, golf courses, sports fields, parks, campsites, recreational areas, roadsides, school grounds, cemeteries, sod farms to control annual and perennial broadleaf weeds and grasses in certain warm-season turf types.

SYMPTOMS

Weed growth ceases within hours after application of CELSIUS WG HERBICIDE. Symptoms progress from yellowing or reddening/purpling to necrosis, resulting in control of weeds within 1-4 weeks after application, depending on the sensitivity of the weed and environmental conditions. Weed control is more rapid when soil temperatures are above 65 degrees, when soil moisture is adequate for weed growth, and when weeds are not under environmental stress (e.g., drought).

MODE OF ACTION

Two of the three active ingredients in Celsius WG HERBICIDE (thiocarbazono-methyl and iodosulfuron-methyl-sodium) inhibit acetylcoaric synthase (ALS). ALS is responsible for the synthesis of essential amino acids that are essential for plant growth. Inhibition of these amino acids stops weed growth. Some weed species, however, have naturally occurring biotypes that are resistant to ALS-inhibiting herbicides. Resistant weed populations may occur when ALS herbicides are used year after year. To add to the weeds controlled and provide resistance management, Celsius WG HERBICIDE also contains dicamba, a benzoic acid herbicide that acts on the same biochemical site as the natural plant auxin, indole acetic acid (IAA). Having several herbicides with different modes of action (MOA) reduces the probability that resistant biotypes to Celsius WG HERBICIDE will develop.

TURF TOLERANCE

This product has been tested and can be used on the following types of turfgrass and their cultivars:
St. Augustinegrass (Floradorn, Palmetto, Bitter Blue, Common, Amerishade, Haleigh, Sapphire, Delmar, Captiva)
Centipedeagrass (Midpan)

Zoysiagrass (Meyer, Empire, Crown, Palisades, Cavalier, Zorro, DeAnza, Zenith)

Buffalograss (Legacy, Cody)

Other turfgrasses and their cultivars may be tolerant to this product. However, tolerance testing should be done prior to use. Some temporary discoloration of certain warm-season grasses may occur to turf under stress from drought, disease, extreme cold or hot weather.

Do not use this product on bahiagrass, seashore paspalum or cool-season turf types, including tall fescue, fine fescue, Kentucky bluegrass, perennial ryegrass, or creeping bentgrass.

USE OF CELSIUS WG HERBICIDE NEAR SENSITIVE GRASSES

CELSIUS WG HERBICIDE can damage or control cool season grasses. Some use sites including many golf courses, grow warm and cool season grasses in the same vicinity. To reduce the probability of CELSIUS WG HERBICIDE being moved from its site of application to adjacent areas containing sensitive grasses, practice the following.

- To prevent tracking from the application site onto sensitive grasses, maintain a 25 ft untreated buffer area adjacent to sensitive grasses.
- When there may be a risk to adjacent sensitive grasses, apply CELSIUS WG HERBICIDE when the soil is less than field capacity. Avoid applications to saturated soil.
- Allow CELSIUS WG HERBICIDE to be absorbed several hours prior to an irrigation cycle. If dew is present on the day following application, irrigate lightly (0.1-0.2 inches) prior to allowing foot traffic or equipment on the treated area.

RESISTANCE MANAGEMENT

Repeated applications of a herbicide may select for resistant weed biotypes. There is no known biotype resistance to this product. If resistance to ALS type herbicides is proven, rotate to a herbicide with an alternate mode of action. Consult a manufacturer representative for the latest information on resistance management for this product.

MOWING INSTRUCTIONS

Do not mow immediately after treating with this product or before spray has dried. After treatment, do not transfer clippings to non-target areas.

IRRIGATION

Weed control and turf tolerance is best if turf is growing well and not under stress at the time of treatment. For best results, irrigate prior to treatment if grass is under stress. After application, do not irrigate until spray has dried.

PRECAUTIONS

1. Rainfall before spray has dried may necessitate retreatment with this product or reduced weed control may result.
2. Make applications to actively growing weeds. Mature, hardened-off weeds may not be controlled. Weed control may be reduced if application is made in the presence of heavy dew, fog, and mist/rain or when weeds are under stress due to drought.
3. Apply spray mixtures of this product within 5 days of mixing to avoid product degradation.
4. Spot treatments to St. Augustinegrass turf at temperatures above 90 degrees may cause temporary growth reduction. Turf will assume normal growth rate after mowing.

RESTRICTIONS

1. Do not apply more than a total of 7.4 oz (210 g) of product per acre (0.17 oz or 4.8 g of product per 1,000 sq ft) per year (365 days).
2. The reentry interval (REI) for sod farms is 24 hours.
3. Do not apply this product by air or through any type of irrigation system.
4. Do not apply this product to turf if a frost or freeze is expected within 48 hours of application.
5. Do not use this product on golf course greens and collars.
6. Do not apply this product on turf exhibiting injury from previous applications of other products.
7. Apply this product only to established turf unless otherwise noted on the label.
8. Some ornamentals may be sensitive to this product. Do not plant ornamentals or bedding plants in treated bare areas for at least 30 days after the last application of this product.
9. Avoid application of this product near the roots of newly planted ornamentals.
10. In order to minimize risk to sensitive areas (water bodies or non-target plants), apply by broadcast application (boom-type sprayers) only when the potential for drift to adjacent sensitive areas is minimal (e.g., when the wind is 10 mph or less and is blowing away from the sensitive area) and maintain a 25-ft buffer between the point of direct application and the closest downwind edge of adjacent sensitive areas.
11. Keep people and pets out of the area during application.
12. Do not allow people or pets to enter the treated areas until sprays have dried.
13. Do not use this product on bahiagrass, seashore paspalum or cool-season turf types, including tall fescue, fine fescue, Kentucky bluegrass, perennial ryegrass, or creeping bentgrass.

APPLICATION

This product may be applied at three different rates depending on the weeds to be controlled. For the appropriate rate and species consult USE RATES FOR WEED CONTROL section. CELSIUS WG HERBICIDE may be applied by broadcast, zone, or spot applications.

For broadcast applications, use a minimum of 10 gallons of water per acre. For weed control in dense weed populations, control of weeds under adverse growing conditions, or control of mature weeds, the optimum spray volumes is 60 gallons per acre.

ZONE

A zone application is defined as a broadcast application made to a defined area (less than 10,000 sq ft per acre). Add the specified product rate of 0.057-0.113 oz (1.6-3.2g) to 1 gallon water. One gallon of spray solution will treat up to 1,000 sq ft.

SPOT

Spot applications are defined as directed applications made to control one or several weeds in a turfgrass situation with a backpack or hand-held sprayer. Add the specified product rate of 0.057-0.113 oz (1.6-3.2g) to 1 gallon water. For spot applications, spray to wet. Avoid over application.

TANK MIXING CELSIUS WG HERBICIDE WITH ADJUVANTS AND FERTILIZERS

- In areas where weed pressure is high and adequate coverage is critical, add a non-ionic surfactant (NIS) at 0.25% v/v to the spray solution.
- For difficult-to-control weeds, the addition of methylated seed oil (MSO) at a rate of 0.25-0.5% v/v may improve weed control.
- Do not use a spray adjuvant at temperatures above 90 degrees.
- Application of CELSIUS WG HERBICIDE with a spray adjuvant or nitrogen-containing fertilizers may damage turf that is under stress.

APPLICATION METHODS, MIXING AND COMPATIBILITY

Uniform, thorough spray coverage with properly calibrated spray equipment is important to achieve consistent weed control. Select spray nozzles and pressure that deliver at least MEDIUM spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver COARSE spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

Spray Solution pH

The efficacy of this product may be affected by the pH of the spray solution. A pH near 7.0 is ideal. If the pH is <6 and if product spray solution is not to be used within 24 hours, add a suitable buffer.

Mixing Instructions

This product must be applied with clean and properly calibrated equipment. Prior to adding this product, ensure that the spray tank, filters and nozzles have been thoroughly cleaned. Prepare only as much spray mixture as needed for application on the same day.

1. Fill spray tank with 25% to 50% of the required volume of water, and begin agitation prior to the addition of this product.
2. Before filling or adding any additional products, ensure full dispersion of this product.
3. If this product is applied in a tank mixture with other products, add this product to the spray tank first and ensure it is thoroughly dispersed before adding other products.
4. Continue to fill the spray tank with water to the desired volume and agitate while adding spray adjuvants or nitrogen fertilizers.
5. Continue agitation during application to ensure a uniform spray mixture.

Compatibility

If this product is to be tank-mixed with other products, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop (precipitation, settling, changes in color), do not use this mixture for spraying. Indications of incompatibility may occur within 5-15 minutes after mixing. Read and follow the label of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions.

TANK CLEANUP PROCEDURE

1. Drain the tank completely, then wash out tank, boom, and hoses with clean water. Drain again.
2. Fill the tank half full with clean water and add ammonia (i.e. 3% domestic ammonia solution) at a dilution rate of 1% (i.e. 1 gallon of domestic ammonia for every 100 gallons of rinsate). Completely fill the tank with water. Agitate/re-circulate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.

3. Repeat Step 2.
4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
5. Flush tank, boom, and hoses with clean water.
6. Inspect tank for visible residues. If present, repeat Step 2.

WEED CONTROL INFORMATION

This product may be used to control a variety of broadleaf weeds and grasses in tolerant turf. Apply this product to susceptible weeds as listed in the Use Rates for Mixed Control section. For certain weeds, a follow-up application 4-6 weeks later may be needed if regrowth is observed. Total amount of product applied in a calendar year (365 days) shall not exceed 4.3 oz (121.0 g) of product per acre.

BERMUDAGRASS OVERSEEDED WITH RYEGRASS

Bermudagrass may be treated with broadcast applications of CELSIUS WG HERBICIDE prior to overseeding. Allow a minimum of 14 days between broadcast application of CELSIUS WG HERBICIDE to established turf and overseeding with rye grass. Allow a minimum of 60 days between broadcast application of CELSIUS WG HERBICIDE to bare ground or to lawn turf with significant areas of bare ground. Intervals between these may cause undesirable reductions in the stand of rye grasses. When making spot applications, allow 28 days before overseeding rye grasses. When other products are mixed with this product, follow the most restrictive application interval prior to rye grass overseeding on such lawns.

SEEDING AND SPRIGGING INTERVALS

Seeded Bermudagrass, Zoysiagrass and Centipedegrass: This product may be applied to Bermudagrass up to 60 days prior to seeding with a significant reduction in stand where the soil is disturbed at planting. For newly established grasses, do not apply this product for at least 4 weeks after emergence as injury may result.

Sprigged Bermudagrass: This product may be applied to sprigged Bermudagrass no sooner than 2 weeks after planting.

DALLISGRASS CONTROL

This product in combination with REVOLVER® Herbicide (2 fl oz per gallon) and MSO at 1% v/v applied as a spot or zone treatment in late summer or early fall will suppress and control dallisgrass. Applications made sooner in the growing season may not be effective. Add the specified product rate of 0.085 -0.113 oz (2.4-3.2 g) thorough water to create approximately one gallon of spray solution; one gallon of spray solution will treat up to 1,000 sq ft. Make a second application if regrowth is observed 30-60 days later, but do not exceed 0.17 oz (4.9 g) of product per 1,000 sq ft in a calendar year.

TANK MIX PARTNERS

CELSIUS WG HERBICIDE may be used in combination with Revolver Herbicide, Sencor® Herbicide, Progress® Herbicide, Ronstar® WSP Herbicide, Ronstar® FLO Herbicide, Acclaim® Extra Herbicide, Illoxan® Herbicide, Finale® Herbicide, and Specticle® 20WSP and Specticle® FLO for post emergent control of many grasses and broad leaf weeds. Synergism development may be slow in weeds treated under cool conditions (soil temperatures 59 degrees or less). For increased speed control during warm weather, add carfentrazone (e.g., Quicksilver® Herbicide at 0.16 oz per acre), or pyridate (e.g., Pyridate® Herbicide at 1.5 oz per acre).

When using CELSIUS WG HERBICIDE in combination with other herbicides, follow the precautions and directions of both labels. When using new tank mixtures with CELSIUS WG HERBICIDE, test physical and biological compatibility prior to use. St. Augustinegrass may show increased sensitivity to tank mixtures of CELSIUS WG HERBICIDE and other herbicides. Do not use tank mixtures of CELSIUS WG HERBICIDE and other herbicides on St. Augustinegrass. APPLICATIONS MAY BE MADE ONLY FOR USES FOR WHICH BOTH CELSIUS WG HERBICIDE AND THE TANK MIX PRODUCT ARE REGISTERED. WHEN APPLYING A TANK MIX WITH THIS PRODUCT, THE MOST HIGHLY RESTRICTIVE LABELING APPLIES.

USE RATES FOR WEED CONTROL

Broadcast Application

Rates for specific weeds are found in the Weeds Controlled tables below. Do not exceed the maximum amount of this product indicated in the table below in a calendar year (365 days).

Amount of CELSIUS WG HERBICIDE				
Use Rate	oz/1,000 sq ft	g/1,000 sq ft	oz/A	g/A
Low	0.057	1.6	2.5	70
Medium	0.085	2.4	3.7	105
High	0.113	3.2	4.9	140
Yearly max.	0.17	4.8	7.4	210

Weeds controlled at 0.057 oz (1.6 g) of product per 1,000 sq ft

Common Name	Genus	Species
Barnyardgrass	<i>Echinochloa</i>	<i>crusalli</i>
Blackseed plantain	<i>Plantago</i>	<i>ragelli</i>
Bracted plantain	<i>Plantago</i>	<i>aristata</i>
Broadleaf plantain, common plantain	<i>Plantago</i>	<i>major</i>
Buckhorn plantain, narrowleaf plantain	<i>Plantago</i>	<i>lanceolata</i>
California burdock	<i>Medicago</i>	<i>polymorpha</i>
Cardinal falsedandelion	<i>Hydrocotylus</i>	<i>carolinianus</i>
Carpalweed, Indian chickweed	<i>Mollugo</i>	<i>verticillata</i>
Catsear dandelion	<i>Hypochaeris</i>	<i>radicata</i>
Common chickweed	<i>Stellaria</i>	<i>media</i>
Common millet, proso millet	<i>Panicum</i>	<i>miliaceum</i>
Common ragweed	<i>Ambrosia</i>	<i>artemisiifolia</i>
Common sunflower	<i>Helianthus</i>	<i>annuus</i>
Common vetch	<i>Vicia</i>	<i>sativa</i>
Creeping beggarweed	<i>Desmodium</i>	<i>canum</i>
Curly dock	<i>Rumex</i>	<i>crispus</i>
Cutleaf evening primrose	<i>Oenothera</i>	<i>laciniata</i>
Dandelion	<i>Lactacium</i>	<i>officinale</i>
Eastern black nightshade	<i>Solanum</i>	<i>phycanthum</i>
Field madder	<i>Sperardia</i>	<i>anerensis</i>
Field violet, wild pansy	<i>Viola</i>	<i>anerensis</i>
Giant toxtail	<i>Setaria</i>	<i>faberi</i>
Giant ragweed	<i>Ambrosia</i>	<i>trifida</i>
Green toxtail	<i>Setaria</i>	<i>viridis</i>
Ground Ivy, Creeping Charlie	<i>Glechoma</i>	<i>hederacea</i>
Hardy bittercress	<i>Cardamine</i>	<i>hirsuta</i>
Hardy nightshade	<i>Solanum</i>	<i>vilosum</i>
Henbit	<i>Lamium</i>	<i>amplexicaule</i>
Horse purslane	<i>Inantheta</i>	<i>portulacastrum</i>
Johnsongrass	<i>Sorghum</i>	<i>halapense</i>
Lawn burweed, spurweed	<i>Silva</i>	<i>sessilis</i>
Oxeye daisy	<i>Leucanthemum</i>	<i>vulgare</i>

Common Name	Genus	Species
Palmer amaranth	<i>Amaranth</i>	<i>palmeri</i>
Pennsylvania smartweed	<i>Polygonum</i>	<i>pennsylvanicum</i>
Pitted morningglory	<i>Ipomoea</i>	<i>lacunosa</i>
Quackgrass	<i>Agropyron</i>	<i>repens</i>
Rabbitfoot clover	<i>Trifolium</i>	<i>arvense</i>
Red sorrel	<i>Rumex</i>	<i>acetosella</i>
Redroot pigweed	<i>Amaranth</i>	<i>retrofractus</i>
Shattercane	<i>Sorghum</i>	<i>bicolor</i>
Spiny sowthistle	<i>Sonchus</i>	<i>asper</i>
Stinkgrass	<i>Eragrostis</i>	<i>ciliatensis</i>
Stinkgrass	<i>Panicum</i>	<i>virgatum</i>
Tansy mustard	<i>Descurainia</i>	<i>pinata</i>
Velvetleaf	<i>Abutilon</i>	<i>theophrasti</i>
Venus looking-glass	<i>Modiola</i>	<i>perfoliata</i>
White clover	<i>Trifolium</i>	<i>repens</i>
White mustard	<i>Brassica</i>	<i>alba</i>
Wild buckwheat	<i>Polygonum</i>	<i>convolvulus</i>
Wild carrot	<i>Daucus</i>	<i>carota</i>
Wild oat	<i>Avena</i>	<i>tatula</i>
Wild onion	<i>Allium</i>	<i>canadense</i>

Weeds controlled at 0.085 oz (2.4 g) of product per 1,000 sq ft

Common Name	Genus	Species
American burnweed, Fireweed	<i>Erechtites</i>	<i>hieracifolia</i>
Asiatic hawkbeard	<i>Youngia</i>	<i>japonica</i>
Black nightshade	<i>Solanum</i>	<i>nigrum</i>
Broadleaf signalgrass	<i>Urochloa</i>	<i>platyphylla</i>
Browntop millet	<i>Bacharia</i>	<i>racosa</i>
Canada thistle	<i>Cirsium</i>	<i>arvense</i>
Canada toadflax	<i>Linaria</i>	<i>canadensis</i>
Carolina dichondra, Dichondra*	<i>Dichondra</i>	<i>carolinensis</i>
Carolina geranium, wild geranium*	<i>Geranium</i>	<i>carolinianum</i>
Carpenter	<i>Axonopus</i>	<i>affinis</i>
Chamberbiter	<i>Phyllanthus</i>	<i>urnaria</i>
Common lambsquarter*	<i>Chenopodium</i>	<i>album</i>
Common purslane*	<i>Portulaca</i>	<i>oleracea</i>
Common waterhemp	<i>Amaranthus</i>	<i>rudis</i>
Corn speedwell	<i>Veronica</i>	<i>arvensis</i>
Creeping speedwell	<i>Veronica</i>	<i>hifloris</i>
Dallisgrass*	<i>Paspalum</i>	<i>dilatatum</i>
Dogfennel	<i>Eupatorium</i>	<i>capillatum</i>

continued

Common Name	Genus	Species
Dollarweed, Pennywort*	<i>Hydrocotyle</i>	<i>Spp.</i>
Entireleaf morningglory	<i>Ipomoea</i>	<i>hederacea var. integrifuscula</i>
Knicks, trampweed	<i>Facelis</i>	<i>retusa</i>
Fall panicum	<i>Panicum</i>	<i>dichotomiflorum</i>
Field pepperweed	<i>Lepidium</i>	<i>campestre</i>
Field sandbur	<i>Cenchrus</i>	<i>incertus</i>
Florida betony	<i>Stachys</i>	<i>floridana</i>
Gopher-tail lovegrass	<i>Eragrostis</i>	<i>ciliaris</i>
Green kyllinga	<i>Kyllinga</i>	<i>brevifolia</i>
Heartwing sorrel	<i>Rumex</i>	<i>hastatulus</i>
Heath aster*	<i>Aster</i>	<i>encodes</i>
Horseweed, mare's tail	<i>Coniza</i>	<i>canadensis</i>
Lytle-leaf morningglory	<i>Ipomoea</i>	<i>hederacea</i>
Knaveit	<i>Scleranthus</i>	<i>annuus</i>
Lady's Mantle	<i>Alchemilla</i>	<i>mollis</i>
Mouse-ear chickweed	<i>Lernium</i>	<i>glomeratum</i>
Paleseed plantain	<i>Plantago</i>	<i>virginica</i>
Parsley piert	<i>Aphanes</i>	<i>microcarpa</i>
Pokeberry	<i>Phytolacca</i>	<i>americana</i>
Poorjoe*	<i>Diodia</i>	<i>teres</i>
Prickly sida*	<i>Sida</i>	<i>spinosa</i>
Prostrate knotweed	<i>Polygonum</i>	<i>aviculare</i>
Red rescue	<i>Festuca</i>	<i>rubra</i>
Rescuegrass*	<i>Bromus</i>	<i>californicus</i>
Russian thistle	<i>Salsola</i>	<i>tragus</i>
Shepherd's purse	<i>Capsella</i>	<i>bursa-pastoris</i>
Sicklepod	<i>Sonch</i>	<i>obtusifolia</i>
Slender aster	<i>Aster</i>	<i>gracilis</i>
Spreading horseweed	<i>Calypocarpus</i>	<i>vialis</i>
Swinecress	<i>Coronopus</i>	<i>alpinus</i>
Tall rescue	<i>Festuca</i>	<i>arundinacea</i>
Texas panicum	<i>Panicum</i>	<i>texanum</i>
Thin paspalum, bull paspalum*	<i>Paspalum</i>	<i>sericeum</i>
Virginia dwarf dandelion	<i>Ragla</i>	<i>virginica</i>
White sweet clover	<i>Medicago</i>	<i>alba</i>
Wild garlic, wild garlic	<i>Allium</i>	<i>vineale</i>
Wild lettuce, tall lettuce	<i>Lactuca</i>	<i>canadensis</i>
Wild mustard	<i>Brassica</i>	<i>kaber</i>
Yellow foxtail	<i>Setaria</i>	<i>lutescens</i>
Yellow rocket	<i>Barbarea</i>	<i>vulgaris</i>
Yellow woodsorrel, Oxalis*	<i>Oxalis</i>	<i>stricta</i>

Weeds controlled at 0.113 oz (3.2 g) of product per 1,000 sq ft

Common Name	Genus	Species
Annual lespedeza	<i>Lespedeza</i>	<i>stricta</i>
Brodye peatwort	<i>Sagina</i>	<i>procumbens</i>
Black medic, hop medic	<i>Medicago</i>	<i>lupulina</i>
Dallisgrass**	<i>Paspalum</i>	<i>dilatatum</i>
Dove-weed	<i>Mimulus</i>	<i>nudiflora</i>
Florida pusley	<i>Richardia</i>	<i>scabra</i>
Hemp sesbania	<i>Sesbania</i>	<i>exaltata</i>
Large crabgrass***	<i>Digitaria</i>	<i>sanguinalis</i>
Prostrate spurge	<i>Chamaesyce</i>	<i>maculata</i>
Purple cutweed	<i>Eupatorium</i>	<i>purpureum</i>
Virginia buttonweed*	<i>Dioclea</i>	<i>virginiana</i>
Western ragweed	<i>Ambrosia</i>	<i>psilostachya</i>
Whiteleaf sage	<i>Salvia</i>	<i>leucophylla</i>

* Weeds that may need a second application of this product for control. If weeds are showing signs of recovery, make a second application 2-4 weeks after the first. Do not exceed 7.4 oz (210 g) of product per acre per year (365 days) for all applications.

** Dallisgrass is best controlled with two spot applications as described above. Follow application directions for a spot application.

*** Large crabgrass (Digitaria sanguinalis) is best controlled at early growth stages. Sequential applications of CELSIUS WG HERBICIDE may be necessary.

Celsius WG HERBICIDE rates and measurements chart for backpack sprayers and hand-cans (For spot treatments only)

Labeled Use Rates

CELSIUS WG HERBICIDE Use Rates	oz/1,000 sq ft	grams/1,000 sq ft	oz/A	grams/A
Low	0.057	1.6	2.5	70
Middle	0.085	2.4	3.7	105
High	0.113	3.2	4.9	140

Volumetric measure

CELSIUS WG HERBICIDE Rate 1 Mix size	Amount of Celsius WG HERBICIDE to use per mix size				
	1 gallons	2 gallons	3 gallons	4 gallons	5 gallons
Low	1/2 teaspoon	1 teaspoon	1.5 teaspoons	2 teaspoons	2.5 teaspoons
Middle	3/4 teaspoon	1.5 teaspoons	2.25 teaspoons	1 tablespoon	3.75 teaspoons
High	1 teaspoon	2 teaspoons	1 tablespoon	4 teaspoons or 1 tablespoon plus 1 teaspoon	5 teaspoons or 1 tablespoon plus 2 teaspoons

Rate of Celsius WG HERBICIDE from measuring cone

oz CELSIUS WG HERBICIDE per mix size				
Rate of CELSIUS WG HERBICIDE 1mix size	2 gallons	3 gallons	4 gallons	10 gallons
Low	-	0.17	0.226	0.56
Middle	0.17	0.25	0.34	0.85
High	0.226	0.34	0.45	1.13

Celsius WG HERBICIDE measuring cone equivalents

Rates on Celsius WG HERBICIDE measuring cone in oz	Equals	Rate	Mix size
0.17	=	Low rate	3 gallon
0.226	=	Low rate	4 gallons
0.25	=	Middle rate	3 gallons
0.34	=	High Rate	3 gallons
0.34	=	Middle rate	4 gallons
0.45	=	High rate	4 gallons
0.56	=	Low rate	10 gallons
0.85	=	Middle rate	10 gallons
1.13	=	High rate	10 gallons

SPRAY DRIFT MANAGEMENT:

Damage to sensitive non-targeted plants can occur as a result of spray drift. Spray drift can be managed by several application factors and by spraying under the appropriate climatic conditions. Consequently, avoidance of spray drift is the responsibility of the applicator.

Sensitive Areas: Apply by broadcast application (boom-type sprayers) only when the potential for drift to adjacent sensitive areas (water bodies or non-target plants) is minimal (e.g., when wind is 10 mph or less and is blowing away from the sensitive areas). Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Do not apply

under circumstances where possible drift to unprotected persons or to food, forage, desirable plants, or crops intended for sale, use, or consumption.

Droplet Size: Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Temperature and Humidity below). Select nozzles and pressure that deliver at least MEDIUM-sized spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Higher-flow-rate nozzles generally deliver larger droplet size and can help reduce drift potential. Nozzles that deliver COARSE spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

Application Height: To minimize spray drift, apply with nozzle height no more than 3 feet above the ground. **Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry. Avoid spraying during conditions of low humidity and/or high temperatures.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Injurious, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Bayer (reg d), the Bayer Cross (reg d), Acclaim[®], Finaler[®], Illoxan[®], Revolver[®], Ronstar[®], Progress[®], Sencor[®], Celsius[™] and Backed by Bayer[™] are trademarks of Bayer. Octane[®] is a registered trademark of Nichino America, Inc. Quicksilver[®] is a registered trademark of FMC Corporation.

ATTENTION:

This specimen label is provided for general information only.

- This pesticide product may not yet be available or approved for sale or use in your area.
- It is your responsibility to follow all Federal, state and local laws and regulations regarding the use of pesticides.
- Before using any pesticide, be sure the intended use is approved in your state or locality.
- Your state or locality may require additional precautions and instructions for use of this product that are not included here.
- Monsanto does not guarantee the completeness or accuracy of this specimen label. The information found in this label may differ from the information found on the product label. You must have the EPA approved labeling with you at the time of use and must read and follow all label directions.
- You should not base any use of a similar product on the precautions, instructions for use or other information you find here.
- Always follow the precautions and instructions for use on the label of the pesticide you are using.

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**CERTAINTY® TURF HERBICIDE IS A
SELECTIVE HERBICIDE FOR CONTROL OF
ANNUAL AND PERENNIAL GRASS AND
BROADLEAF WEEDS IN
HIGHLY MANAGED TURF SITES.**

Complete Directions For Use

EPA Reg. No. 524-534

2008-1

Read the entire label before using this product.

Use only according to label instructions.

Not all products recommended on this label are registered for use in California. Check the registration status of each product in California before using.

Read the "LIMIT OF WARRANTY AND LIABILITY" 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.

1.0 INGREDIENTS

ACTIVE INGREDIENT:

Sulfosulfuron	75.0%
OTHER INGREDIENTS:	25.0%
	100.0%

Certainty Turf herbicide is formulated as a water dispersible granule (WDG).

This product is protected by U.S. Patent Nos. 5,017,212 and 5,534,482. No license granted under any non U.S. Patent(s).

2.0 IMPORTANT PHONE NUMBERS

FOR PRODUCT INFORMATION OR ASSISTANCE
IN USING THIS PRODUCT,
CALL TOLL-FREE, 1-800-332-3111
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!

CAUSES MODERATE EYE IRRITATION.

Avoid contact with eyes or clothing.

Wash thoroughly with soap and water after handling.

FIRST AID	
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 eyes. • Call a poison control center or physician for treatment advice.
• Have the product container or label with you when calling a poison control center or physician, or going for treatment. • In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000. • This product is identified as Certainty Turf Herbicide, EPA Reg. No. 524-534.	

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

3.2 Environmental Hazards

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

This pesticide is highly toxic to non-target plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to plants in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of Federal Laws.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions For Use on this label or in separately published Monsanto Supplemental Labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves, such as nitrile rubber, neoprene rubber or polyethylene. For more options, follow the instructions for Category A (dry and water-based formulations) on an EPA chemical resistant category selection chart.

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 (40 CFR Part 170) for agricultural pesticides. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep people and pets off treated areas until spray solution has dried.

4.0 STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store under cool, dry conditions (below 120°F). Do not store under moist conditions.

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

CONTAINER DISPOSAL: Emptied container retains product residue. Observe all labeled safeguards until container is destroyed. 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

Product Description: This product is a postemergence, systemic herbicide with limited soil residual activity. It provides postemergence control of many annual and perennial sedges, grass and broadleaf weeds on highly managed turf, sod farms and native grass sites. It is a selective herbicide that can be used over the top of many perennial warm-season and selected cool-season turfgrasses. Refer to the appropriate sections of this label for approved turf species.

Use Sites: This product may be used for general weed control on highly managed turf and native grasses. This product may be applied to residential and commercial turf sites, including apartment complexes, athletic fields, cemeteries, golf course fairways, golf course roughs, golf course tees, and other golf course areas, hotel properties, office complexes, parks, public turf areas, retail sites, storage facilities, school grounds, sod and turfgrass seed farms, and other highly managed turfgrass sites. **DO NOT apply directly to or within 4 feet of golf course putting greens.**

This product may be applied at recommended rates as a post-directed spray around any established warm-season ornamental grass or established woody ornamental species in landscaped areas. Avoid contact of this product with leaves of desirable plants as foliar injury, discoloration or loss of the plant may result.

When to Spray: Best results are obtained when target weeds are actively growing and not disturbed by mowing for at least 2 days before and 2 days after application.

Time to Symptoms: This product is absorbed by both the roots and the foliage of plants and rapidly inhibits the growth of susceptible weeds. Susceptible weed growth stops within 24 hours of treatment even though visual symptoms are slow to develop. Susceptible weeds usually show yellowing or browning within 2 to 3 weeks. Warm, moist conditions following application will accelerate herbicidal activity. Cold, dry conditions will delay herbicidal activity. Weeds stressed by drought are less susceptible to this product.

Rainfastness: Heavy rainfall or irrigation within 2 hours after application may wash this product off of the foliage and a repeat application may be required for adequate control.

Maximum Annual Use Rate: The combined total of all treatments must not exceed 2.66 ounces of this product per acre per year.

IMPORTANT: Avoid contact of this product with the roots or foliage of susceptible non-target vegetation as injury may occur. This includes areas where this product may be washed or moved into contact with roots of desirable vegetation.

Susceptible plants may be injured if seeded or transplanted into treated areas unless otherwise directed in this label.

6.0 MIXING

Thoroughly clean equipment prior to mixing spray solution.

Eliminate any risk of siphoning the contents of the spray or mixing tank back into the carrier source while mixing. Use approved anti-back-siphoning devices where required by State or local regulations.

6.1 Mixing with Water

This product mixes readily with water. Mix spray solutions of this product as follows. Fill the spray tank with about three-fourths of the desired final volume. Add the recommended amount of this product. Continue the filling process while maintaining agitation. Add nonionic surfactant near the end of the filling process.

6.2 Mixing For Hand-Held Sprayers

Hand-held sprayer applications should be made at a rate of 2 gallons of spray solution per 1000 square feet.

Using the measuring scoop provided in the product packaging, follow the instructions below to prepare the proper spray solution.

Measuring Scoop Instructions

Using the **SMALL SCOOP** (0.16-gram scoop) provided, refer to the following table for the **Number of Scoops** of product required to achieve the **Desired Application Rate** when mixed in 2 gallons of water.

Desired Application Rate (ounces of product/acre)	Number of Scoops (small scoop)	Mix Volume (gallons of water)	Spray Rate (gallons/1000 ft ²)
0.25	1	2.0	2
0.50	2	2.0	2
0.75	3	2.0	2

Using the **LARGE SCOOP** (0.8-gram scoop) provided, refer to the following table for the appropriate **Mix Volume** (gallons of water) required to achieve the **Desired Application Rate**.

Desired Application Rate (ounces of product/acre)	Number of Scoops (large scoop)	Mix Volume (gallons of water)	Spray Rate (gallons/1000 ft ²)
1.0	1	2.5	2
1.25	1	2.0	2
2.0	2	2.5	2

Ensure that product is measured as a level scoop and is not rounded.

Add 2 teaspoons (1/3 fluid ounce) of nonionic surfactant per gallon of water.

6.3 Tank-Mixing Procedure

For tank mixtures, add individual components to the spray tank in the following sequence: water, water dispersible granules (this product), water-soluble bags, dry flowables, emulsifiable concentrates, drift control additive, water-soluble liquids, nonionic surfactants.

6.4 Surfactants and Adjuvants

Use a nonionic surfactant at 0.25 to 0.5 percent by volume (1 to 2 quarts per 100 gallons of spray solution). Use only nonionic surfactants that contain at least 90 percent active ingredient. **Do not use nonionic surfactants or other additives that alter the pH of the spray solution below pH 5. Use of surfactants that contain d'Limonene, methylated seed oil, or COC (crop oil concentrate) may cause temporary turf discoloration.**

6.5 Colorants and Dyes

Colorants or marking dyes may be added to spray solutions of this product; however, they can reduce product performance. Use colorants and dyes according to the manufacturer's recommendations.

7.0 APPLICATION EQUIPMENT AND TECHNIQUES

Apply spray solutions of this product with properly maintained and calibrated equipment capable of delivering desired volumes.

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

7.1 Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The potential for spray drift is determined by the interaction of many equipment- and weather-related factors. The applicator is responsible for considering all these factors when making spraying decisions.

Avoid applying at excessive speed or pressure. Care must be taken to prevent injury to desirable plants when applying this product. Do not allow this herbicide solution to mist, drift, or splash onto desirable non-target vegetation. 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 the generation of fine spray particles (mist) that are likely to drift beyond the application site.

7.2 Ground Broadcast Equipment

Apply this product uniformly with properly calibrated ground equipment in 10 to 50 gallons of water per acre. Select spray volumes that ensure thorough and uniform weed coverage. Use equipment that is capable of continuous agitation. Choose nozzles that provide optimum spray distribution and uniform coverage at a spray pressure appropriate for applying postemergence herbicides. Avoid streaking, skips, overlaps and spray drift during application.

7.3 Hand-Held Sprayers

Backpack sprayers, pump-up pressure sprayers, and other, similar types of hand-held sprayers may be used to apply this product. Apply to foliage of vegetation to be controlled at a rate of 2 gallons of spray solution per 1000 square feet. Spray coverage should be uniform and complete. Do not spray to the point of runoff.

7.4 Equipment Cleaning

Thoroughly clean application equipment with a 1-percent solution of ammonia (1 quart of ammonia for every 25 gallons of rinse water) promptly after using this product. Use a sufficient volume of cleaning solution to thoroughly rinse all surfaces and to flush all hoses. Rinse with water and repeat the cleaning procedure with the ammonia solution. Complete the cleaning procedure by rinsing thoroughly with clean water.

If visible residue is present in the spray tank, use a 1-percent solution of ammonia plus 0.25 percent nonionic surfactant (8 fluid ounces per 25 gallons of water) as the cleaning solution.

8.0 WARM-SEASON TURFGRASSES

This product generally has been shown to be safe for use on the warm-season turfgrasses listed in this section.

- Bermudagrass (common or hybrid)
- Bahiagrass
- Buffalograss
- Centipedegrass
- Kikuyugrass
- St. Augustinegrass
- Seashore paspalum
- Zoysiagrass

Use of this product may result in temporary chlorosis, and may affect the growth pattern or delay green-up of the desirable turf. St. Augustinegrass and seashore paspalum may be more sensitive to this product than other grasses depending on environmental conditions, cultivar differences and other influential factors. For

St. Augustinegrass and seashore paspalum, test this product on a small area prior to wide-scale use to determine if this product is suitable for your management and cultural practices.

8.1 Sedge Control

For the selective control of the weeds listed in this section, apply this product at 1.25 ounces per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of 1.25 ounces per acre may be made 4 or more weeks after the initial treatment, if needed.

Kyllinga, false green

Kyllinga gracilima

Kyllinga, fragrant

Kyllinga sesquiflorus

Kyllinga, green

Kyllinga brevifolia

Nutsedge, purple

Cyperus rotundus

Nutsedge, yellow

Cyperus esculentus

Sedge, globe

Cyperus croceus

Sedges, annual

Cyperus spp.

8.2 Tall Fescue Control

Best control of tall fescue is obtained when this product is applied at 1.25 ounces per acre followed by a second application of 1.25 ounces per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at 2.0 ounces per acre.

8.3 Dallisgrass Suppression in Bermudagrass

The following application includes the use of MSMA. MSMA can cause injury to common and hybrid bermudagrass turf. Test the following tank-mix recommendation on a small area prior to wide-scale use to determine if this application is suitable for your bermudagrass management objectives.

For suppression of dallisgrass in bermudagrass turf, apply this product, when dallisgrass is actively growing, at a rate of 1.25 ounces of product per acre in a tank mixture with 2 pounds of MSMA per acre and 0.25 percent by volume nonionic surfactant (1 quart per 100 gallons of spray solution). Reapply this same tank mixture 2 to 4 weeks after initial application.

As an alternative program, apply MSMA at 2 pounds active ingredient per acre with 0.25 percent by volume nonionic surfactant as an initial treatment, wait two weeks and apply 2.0 ounces of this product per acre. Wait an additional two weeks and apply MSMA again at 2 pounds active ingredient per acre with 0.25 percent by volume nonionic surfactant.

8.4 Buttonweed Suppression

For suppression of buttonweed apply this product at 1.25 ounces per acre. This application will provide suppression or partial control of buttonweed for 4 to 6 weeks.

For enhanced buttonweed control, tank-mix this product with a broadleaf herbicide labeled for buttonweed control in the desired warm-season turfgrass. Read and follow the label directions, precautionary statements and all other label information of all products used in the tank mixture. Use all products according to labeled rates and apply the tank mixture according to the most restrictive precautionary statements of the products being used.

8.5 Annual Bluegrass (*Poa annua*) Control in Non-Overseeded Turf

For selective control of annual bluegrass (*Poa annua*), apply this product at 1.25 to 2.0 ounces per acre. Use the higher rate of this product for control in areas of established, dense weed infestation.

Best results are obtained when weeds are in the early stage of growth and prior to tillering.

IN DORMANT BERMUDAGRASS ONLY, tank mixtures of this product with Roundup PRO® or QuikPRO® herbicides may be used to increase the spectrum of vegetation controlled. Read and follow the label directions, precautionary statements and all other label information on Roundup PRO or QuikPRO herbicides. Refer to the Roundup PRO or QuikPRO product labels for approved application rates. Always apply tank mixtures according to the most restrictive precautionary statements of the products being used.

8.6 Annual Bluegrass (*Poa annua*) Control Prior to Overseeding Turf with Perennial Ryegrass

Apply this product at 2.0 ounces per acre to control *Poa annua* prior to overseeding warm-season turf with perennial ryegrass. Begin applications after *Poa annua* germination and 7 to 10 days prior to overseeding.

8.7 Removal of Overseeded Perennial Ryegrass (Transition Aid)

Best results are obtained by applying this product at 1.25 ounces per acre followed by a second application of 1.25 ounces per acre at 21 to 28 days after the initial application when daily temperatures are expected to exceed 80° F during the treatment period. If a single application is preferred, apply this product at 2.0 ounces per acre.

8.8 Additional Weeds Controlled

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at 1.25 to 2.0 ounces per acre. Use the higher rate of this product for control in areas of established, dense weed infestation. If using an initial rate of application of 1.25 ounces per acre, a second application of 1.25 ounces per acre may be made 4 or more weeks after the initial treatment, if needed.

Barley, little <i>Hordeum pusillum</i>	Garlic, wild <i>Allium vineale</i>
Bedstraw, catchweed <i>Galium aparine</i>	Geranium, Carolina¹ <i>Geranium carolinianum</i>
Bentgrass, creeping¹ <i>Agrostis stolonifera</i>	Henbit¹ <i>Lamium amplexicaule</i>
Bluegrass, roughstalk <i>Poa trivialis</i>	Ivy, ground¹ <i>Glechoma hederacea</i>
Bluegrass, bulbous <i>Poa bulbosa</i>	Johnsongrass <i>Sorghum halepense</i>
Burweed, lawn <i>Soliva pterosperma</i>	Mustard, wild <i>Sinapis arvensis</i>
Buttercup <i>Ranunculus arvensis</i>	Pennycress, field <i>Thlaspi arvense</i>
Chickweed, common <i>Stellaria media</i>	Quackgrass¹ <i>Elytrigia repens</i>
Clover, white <i>Trifolium repens</i>	Ryegrass, perennial <i>Lolium perenne</i>
Crowfootgrass <i>Dactyloctenium aegyptium</i>	Shepherd's-purse <i>Capsella bursa-pastoris</i>
Dandelion <i>Taraxacum officinale</i>	

¹ Suppression or partial control only

9.0 COOL-SEASON TURFGRASSES

This product is recommended for use on creeping bentgrass, Kentucky bluegrass and Kentucky bluegrass mixtures with perennial ryegrass and/or fine fescues.

On cool-season turfgrass, apply this product only when turfgrass is actively growing and mowing is required. Applications made in the fall after temperatures have decreased and regular mowing is no longer required may have an increased potential to cause turf injury and may delay spring green-up.

Use of this product may result in temporary chlorosis and discoloration, and may temporarily affect the growth pattern of the desirable turf. These symptoms generally appear 7 to 10 days after application and are typically gone within 21 to 28 days. Turf response is more pronounced under extreme environmental conditions. Perennial ryegrass, fine fescues and creeping bentgrass are more sensitive to this product. If undesirable turf response occurs, skip or delay additional applications to allow turf to recover to a desirable quality. Over-application may result in severe turf injury, thinning or loss of turfgrass stands.

Test this product on a small area prior to wide-scale use to determine if this product is suitable for your turf management and cultural practices.

9.1 Weed Control in Established Creeping Bentgrass

For use in established creeping bentgrass on golf course fairways, roughs, approaches and tees.

9.1.1 Roughstalk Bluegrass (*Poa trivialis*) Control

For suppression, apply 0.25 ounce of this product per acre. For control, up to two additional applications of 0.25 ounce of this product per acre at 14- to 21-day intervals may be made. Make all applications between June 1 and September 15.

For severe *Poa trivialis* infestations, apply a single application of 0.75 ounce per acre of this product in late summer, 21 to 28 days prior to overseeding creeping bentgrass in a renovation approach. This treatment will result in temporary chlorosis and discoloration, and will temporarily affect the growth pattern of the desirable turf.

As *Poa trivialis* is controlled, bare patches may occur in the turf. Creeping bentgrass can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of *Poa trivialis* and to maintain overall turf quality.

9.2 Weed Control in Kentucky Bluegrass

Weed control recommendations in this section are for use ONLY on established pure stands of Kentucky bluegrass.

9.2.1 Sedge Control

For the selective control of the weeds listed in this section, apply this product at 0.75 ounce per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of 0.75 ounce per acre may be made 4 or more weeks after the initial treatment, if needed.

Kyllinga, green <i>Kyllinga brevifolia</i>	Sedge, globe <i>Cyperus croceus</i>
Nutsedge, purple <i>Cyperus rotundus</i>	Sedges, annual <i>Cyperus spp.</i>
Nutsedge, yellow <i>Cyperus esculentus</i>	

9.2.2 Roughstalk Bluegrass (*Poa trivialis*) Control

Apply this product at 0.5 ounce per acre followed by a second application of 0.5 ounce per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at 0.75 ounce per acre.

As *Poa trivialis* is controlled, bare patches may occur in the turf. Kentucky bluegrass can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of *Poa trivialis* and to maintain overall turf quality.

9.2.3 Tall Fescue Control

Apply this product at 0.75 ounce per acre followed by a second application of 0.75 ounce per acre at 21 to 28 days after the initial application.

9.2.4 Additional Weeds Controlled

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at 0.75 ounce per acre. A sequential application of 0.75 ounce per acre may be made 4 or more weeks after the initial treatment, if needed.

Barley, little <i>Hordeum pusillum</i>	Garlic, wild¹ <i>Allium vineale</i>
Bedstraw, catchweed <i>Galium aparine</i>	Henbit¹ <i>Lamium amplexicaule</i>
Bluegrass, annual <i>Poa annua</i>	Ivy, ground¹ <i>Glechoma hederacea</i>
Bluegrass, bulbous <i>Poa bulbosa</i>	Johnsongrass <i>Sorghum halepense</i>
Burweed, lawn <i>Soliva pterosperma</i>	Mustard, tumble <i>Sisymbrium altissimum</i>
Buttercup <i>Ranunculus arvensis</i>	Mustard, wild <i>Sinapis arvensis</i>
Chamomile, mayweed <i>Anthemus cotula</i>	Pennycress, field <i>Thlaspi arvense</i>
Chickweed, common <i>Stellaria media</i>	Quackgrass¹ <i>Elytrigia repens</i>
Clover, white <i>Trifolium repens</i>	Shepherd's-purse <i>Capsella bursa-pastoris</i>
Dandelion <i>Taraxacum officinale</i>	

¹ Suppression or partial control only

10.0 NATIVE GRASSES

This product generally has been shown to be safe for use on the warm-season native grasses listed in this section.

- Big bluestem
- Little bluestem
- Bushy bluestem
- Blue oats grama
- Buffalograss
- Indiangrass
- Lovegrass
- Switchgrass

Use of this product may result in temporary chlorosis or temporarily affect the growth pattern of these native grasses. If discoloration or excessive thinning of the native grasses occurs, skip or delay additional applications to allow the native grasses to recover to a desirable quality.

Test this product on a small area prior to wide-scale use to determine if this product is suitable for your management and cultural practices.

10.1 Sedge Control

For the selective control of the weeds listed in this section, apply this product at 1.25 ounces per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of 1.25 ounces per acre may be made 4 or more weeks after the initial treatment, if needed.

Kyllinga, false green

Kyllinga gracilima

Kyllinga, fragrant

Kyllinga sesquiflorus

Kyllinga, green

Kyllinga brevifolia

Nutsedge, purple

Cyperus rotundus

Nutsedge, yellow

Cyperus esculentus

Sedge, globe

Cyperus croceus

Sedges, annual

Cyperus spp.

10.2 Tall Fescue Control

Best control of tall fescue is obtained when this product is applied at 1.25 ounces per acre followed by a second application of 1.25 ounces per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at 2.0 ounces per acre.

10.3 Additional Weeds Controlled

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at 1.25 ounces per acre. A sequential application of 1.25 ounces per acre may be made 4 or more weeks after the initial treatment, if needed.

Barley, little

Hordeum pusillum

Bedstraw, catchweed

Galium aparine

Bentgrass, creeping

Agrostis stolonifera

Bluegrass, annual¹

Poa annua

Bluegrass, roughstalk

Poa trivialis

Bluegrass, bulbous

Poa bulbosa

Burweed, lawn

Soliva pterospema

Buttercup

Ranunculus arvensis

Buttonweed¹

Diodia virginiana

Chickweed, common

Stellaria media

Clover, white

Trifolium repens

Crowfootgrass

Dactyloctenium aegyptium

Dallisgrass¹

Paspalum dilatatum

Dandelion

Taraxacum officinale

Garlic, wild

Allium vineale

Geranium, Carolina¹

Geranium carolinianum

Henbit¹

Lamium amplexicaule

Ivy, ground

Glechoma hederacea

Johnsongrass

Sorghum halepense

Mustard, wild

Sinapis arvensis

Pennycress, field

Thlaspi arvense

Quackgrass¹

Elytrigia repens

Ryegrass, perennial

Lolium perenne

Shepherd's-purse

Capsella bursa-pastoris

11.0 LIMIT OF WARRANTY AND LIABILITY

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¹ Suppression or partial control only