

432-1507

04/18/2012

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

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

Gregory C. Mattern  
Bayer Environmental Science  
P.O. Box 12014, 2 T.W Alexander Drive  
Research Triangle Park, NC 27709

APR 18 2012

**Subject:** Amendment changing PPE due to CA-DPR requirement  
**Product name:** Celsius WG  
**EPA Reg. No:** 432-1507  
**Application Dated:** January 30, 2012

Dear Mr. Mattern,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of your label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact Grant Rowland at 703-347-0254 or at Rowland.Grant@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Kathryn V. Montague".

Kathryn Montague  
Product Manager 23  
Herbicide Branch  
Registration Division (7505P)



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GROUP L OAC HERBICIDE

APR 18 2012

# CELSIUS® WG

[ABN: CELSIUS™ WDG [Herbicide]]

the Federal Insecticide, Fungicide, and Rodenticide Act, 432-1507

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

<b>ACTIVE INGREDIENTS:</b>	Thiencarbazone-methyl (CAS Number 317815-83-1).....	<b>8.7 %</b>
	Iodosulfuron-methyl-sodium (CAS Number 144550-36-7).....	<b>1.9 %</b>
	Dicamba (CAS Number 1918-00-9).....	<b>57.4 %</b>

**OTHER INGREDIENTS:**..... **32.0%**

CELSIUS WG is formulated as a 68% water dispersible granule **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.

[Note: Brackets indicate optional text or editorial statement]

EPA Reg No. 432-1507

EPA Est. No. 264-DEU-001

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

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**

### FIRST AID

<b>If In Eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If Swallowed</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>

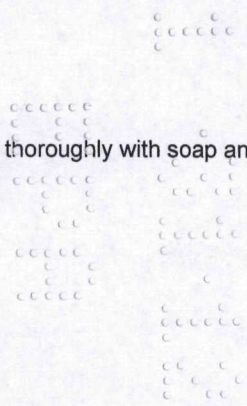
For **MEDICAL Emergencies** Call **24 Hours A Day 1-800-334-7577**. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

### 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.





**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

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

**All mixers, loaders, applicators and other handlers must wear:** Long-sleeved shirt, long pants, shoes plus socks, and chemical-resistant gloves (except for applicators using groundboom equipment) made of any waterproof material such as polyethylene or polyvinyl chloride. See Engineering Control Statement for additional requirements and exceptions.

**User Safety Requirements:**

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

**Engineering control statement:**

When handlers use closed systems, 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**

Remove clothing/PPE immediately if pesticide gets inside or after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash hands thoroughly with soap and water after handling. Wash hands before eating, drinking, chewing gum, using tobacco, 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 via runoff," according to the chemical's "mean" soil partition coefficient (Kd) for several days after application. A level well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading 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.

Some of the chemicals in this product have properties and characteristics associated with chemicals detected in ground water. These chemicals may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

**PHYSICAL OR CHEMICAL HAZARDS**

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

**DIRECTIONS FOR USE**

**It is a violation of Federal law to use this product in a manner inconsistent with its labeling.  
Read entire label before using this product.**

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 same area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

[The following Agricultural Use Requirement box is only required if agricultural uses, such as sod farms, are on product label:]

**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 intervals. 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 24 hours (sod farm use only).

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil or water, is coveralls over long-sleeved shirt and long pants, chemical-resistant footwear plus socks, chemical-resistant gloves made of any waterproof material, chemical-resistant headgear for overhead exposure, and protective eyewear.



## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter or allow others to enter treated areas until sprays have dried.

## 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 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 is a selective herbicide with multiple modes of action that provide a broad spectrum of weed control.

CELSIUS™ WG 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 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. 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 (thiencarbazone-methyl and iodosulfuron-methyl-sodium) inhibit acetolactate 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 (Floritam, Palmetto, Bitter Blue, Common, Amerishade, Raleigh, Sapphire, Delmar, Captiva [add or delete varieties as needed])

Bermudagrass (Tifway 419, Common, Tifsport, Discovery, Celebration, Sahara [add or delete varieties as needed])

Centipedegrass (Tifblair [add or delete varieties as needed])

Zoysiagrass (Meyer, Empire, Crown, Palisades, Cavalier, Zorro, DeAnza, Zenith [add or delete varieties as needed])

Bahiagrass [(Argentine; Pensacola [add or delete varieties as needed])

Buffalograss (Legacy, Cody [add or delete varieties as needed])

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 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 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.
- Allow the leaf surface of treated turf to dry several hours prior to allowing foot traffic or equipment in the treated area adjacent to sensitive grasses.
- When there may be a risk to adjacent sensitive grasses, apply CELSIUS WG when the soil is less than field capacity. Avoid applications to saturated soil.
- Allow CELSIUS WG 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 regulation. 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. *[If sod farms is listed on label, add the following: 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. *[If golf course use is listed on the label, the following restriction must be added: 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 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 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 PROCEDUR

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 Weed Control section. For certain weeds, a follow-up application made 4-6 weeks later may be needed if regrowth is observed. Total amount of product applied in a calendar year (365 days) must not exceed 7.4 oz (210 g) of product per acre.

### BERMUDAGRASS OVERSEEDED WITH RYEGRASS

Bermudagrass may be treated with broadcast applications of CELSIUS™ WG prior to overseeding. Allow a minimum of 14 days between broadcast application of CELSIUS™ WG to established turf and overseeding with ryegrass. Allow a minimum of 60 days between broadcast application of CELSIUS WG Herbicide to bareground or to thin turf with significant areas of bareground. Intervals less than these may cause undesirable reductions in the stand of ryegrass. When making spot applications, allow 28 days before overseeding ryegrass. [This product may be used in conjunction with an application of Ronstar prior to overseeding for post emergent and pre emergent weed control. Allow 4 months between the use of tank mix combinations of this product and RONSTAR herbicides and ryegrass overseeding]. When other products are mixed with this product, follow the most restrictive application interval prior to ryegrass overseeding on each label.

### SEEDING AND SPRIGGING INTERVALS

**Seeded Bermudagrass, Zoysiagrass and Centipedegrass:** This product may be applied to Bermudagrass up to 60 days prior to seeding without a significant reduction in stand where the soil is disturbed at planting. For newly established stands, 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 sprigging.

### 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/or 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) to enough 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 (4.8 g) of product per 1,000 sq. ft. in a calendar year.

### CRABGRASS CONTROL

CELSIUS WG controls large crabgrass (*Digitaria sanguinalis*) prior to tillering. Add the specified product rate of 0.085 - 0.113 oz (2.4 - 3.2 g) to enough 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 (4.8 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, Prograss® 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. Symptom development may be slow in weeds treated under cool conditions (soil temperatures 65 degrees or less). For increased speed of control during cool temperatures, add carfentrazone (e.g., Quicksilver® Herbicide at 0.16 oz per acre), or pyraflufen-ethyl (e.g., Octane® Herbicide at 1.5 oz per acre).

When using CELSIUS WG in combination with other herbicides, follow the precautions and directions of both labels. When using new tank mixtures with CELSIUS WG, test physical and biological compatibility prior to use. St Augustinegrass may show increased sensitivity to tank mixtures of Celsius and other products. Evaluate these tank mixtures in a limited area before widespread applications.



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APPLICATIONS MAY BE MADE EITHER FOR USES FOR WHICH BOTH CELSIUS 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).

Use Rate	Amount of CELSIUS WG			
	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 0.05, oz (1.6 g) of product per 1,000 sq ..**

Common Name	Genus	Species
Barnyardgrass	Echinochloa	crusgalli
Blackseed plantain	Plantago	rugelii
Bracted plantain	Plantago	aristata
Broadleaf plantain, common plantain	Plantago	major
Buckhorn plantain, narrowleaf plantain	Plantago	lanceolata
California burclover	Medicago	polymorpha
Carolina faldedandelion	Pyrrhopappus	carolinianus
Carpetweed, Indian chickweed	Mollugo	verticillata
Catsear dandelion	Hypochoeris	radicata
Common chickweed	Stellaria	media
Common millet, proso millet	Panicum	miliaceum
Common ragweed	Ambrosia	artemisiifolia
Common sunflower	Helianthus	annuus
Common vetch	Vicia	sativa
Creeping beggarweed	Desmodium	canum
Curly dock	Rumex	crispus
Cutleaf evening primrose	Oenothera	laciniata
Dandelion	Taraxacum	officinale
Eastern black nightshade	Solanum	ptychanthum
Field madder	Sherardia	arvensis
Field violet, wild pansy	Viola	arvensis
Giant foxtail	Setaria	faberi
Giant ragweed	Ambrosia	trifida
Green foxtail	Setaria	viridis
Ground ivy, Creeping Charlie	Glechoma	hederacea
Hairy bittercress	Cardamine	hirsuta
Hairy nightshade	Solanum	villosum
Henbit	Lamium	amplexicaule
Horse purslane	Trianthema	portulacastrum
Johnsongrass	Sorghum	halepense
Lawn burweed, spurweed	Soliva	sessilis
Oxeye daisy	Leucanthemum	vulgare
Palmer amaranth	Amaranth	palmeri
Pennsylvania smartweed	Polygonum	pensylvanicum
Pitted morningglory	Ipomea	lacunosa
Quackgrass	Agropyron	repens
Rabbitfoot clover	Trifolium	arvense
Red sorrel	Rumex	acetosella
Redroot pigweed	Amaranth	retroflexus
Shattercane	Sorghum	bicolor
Southern brassbuttons	Cotula	australis
Spiny sowthistle	Sonchus	asper
Stinkgrass	Eragrostis	cilianensis
Switchgrass	Panicum	virgatum
Tansy mustard	Descurainia	pinnata
Velvetleaf	Abutilon	theophrasti
Venus looking-glass	Triodanis	perfoliata
White clover	Trifolium	repens
White mustard	Brassica	alba
Wild buckwheat	Polygonum	convolvulus
Wild carrot	Daucus	carota
Wild oat	Avena	fatua
Wild onion	Allium	canadense



Weeds controlled at 0.35 oz (2.4 g) of product per 1,000 sq ft

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Common Name	Genus	Species
American burnweed, Fireweed	Erechtites	hieraciifolia
Annual bluegrass	Poa	annua
Asiatic hawkbeard	Youngia	japonica
Bahiagrass*	Paspalum	notatum
Black nightshade	Solanum	nigrum
Broadleaf signalgrass	Urochloa	platyphylla
Browntop millet	Brachiaria	ramosa
Canada thistle	Cirsium	arvense
Canada toadflax	Linaria	canadensis
Carolina dichondra, Dichondra*	Dichondra	carolinensis
Carolina geranium, wild geranium*	Geranium	carolinianum
Carpetgrass	Axonopus	affinis
Chamberbitter	Phyllanthus	urinaria
Common lambsquarter*	Chenopodium	album
Common purslane*	Portulaca	oleracea
Common waterhemp	Amaranthus	rudis
Corn speedwell	Veronica	arvensis
Creeping speedwell	Veronica	filiformis
Dalligrass**	Paspalum	dilatatum
Dogfennel	Eupatorium	capillifolium
Dollarweed, Pennywort*	Hydrocotyle	Spp.
Entireleaf morningglory	Ipomea	hederacea var. integruscula
Facelis, trampweed	Facelis	retusa
Fall panicum	Panicum	dichotomiflorum
Field pansy, Johnny jump-up*	Viola	rafinesquil/bicolor
Field pepperweed	Lepidium	campestre
Field sandbur	Cenchrus	incertus
Fleabane	Erigeron	Spp
Florida betony	Stachys	floridana
Gophertail lovegrass	Eragrostis	cillaris
Green kyllinga	Kyllinga	brevifolia
Heartwing sorrel	Rumex	hastatulus
Heath aster*	Aster	Ericoides
Hop clovers, several species	Trifolium	Spp.
Horseweed, marestalk	Conza	canadensis
Ivyleaf morningglory	Ipomea	hederacea
Khakiweed*	Alternanthera	caracasana
Knawel	Scleranthus	annuus
Lady's Mantle	Alchemilla	mollis
Mouse-ear chickweed	Cerastium	glomeratum
Paleseed plantain	Plantago	virginica
Parsley piert	Aphanes	microcarpa
Pokeberry	Phytolacca	americana
Poorjoe*	Diodia	teres
Prickly sida*	Sida	spinosa
Prostrate knotweed	Polygonum	aviculare
Red fescue	Festuca	rubra
Rescuegrass*	Bromus	catharticus
Russian thistle	Salsola	tragus
Shepherd's purse	Capsella	bursa-pastoris
Sicklepod	Senna	obtusifolia
Slender aster	Aster	gracillis
Sprawling horseweed	Calyptocarpus	vialis
Swinecress	Coronopus	didymus
Tall fescue	Festuca	arundinacea
Texas panicum	Panicum	texanum



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Thin paspalum, bull paspalum*	Paspalum	staceum
Virginia dwarf dandelion	Krigia	virginica
White sweet clover	Melilotus	alba
Wild garlic, field garlic	Allium	vineale
Wild lettuce, tall lettuce	Lactuca	canadensis
Wild mustard	Brassica	kaber
Wild parsley	Lomatium	foeniculaceum
Yellow foxtail	Setaria	lutescens
Yellow rocket	Barbarea	vulgaris
Yellow woodsorrel, Oxalis*	Oxalis	stricta

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

Common Name	Genus	Species
Annual lespedeza	Lespedeza	striata
Birdseye pearlwort	Sagina	procumbens
Black medic, hop medic	Medicago	lupulina
Dallisgrass**	Paspalum	dilatatum
Doveweed	Murdannia	nudiflora
Florida pusley	Richardia	scabra
Hemp sesbania	Sesbania	exaltata
Large crabgrass***	Digitaria	sanguinalis
Prostrate spurge	Chamaesyce	maculata
Purple cudweed	Gnaphalium	purpureum
Ryegrass (clumpy)	Lolium	perenne
Virginia buttonweed*	Diodia	virginiana
Western ragweed	Ambrosia	psilostachya
Whiteleaf sage	Salvia	leucophylla

\* 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 as described above. Sequential applications of Celsius may be necessary

**[Optional packaging-related product measurement directions]:**

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

**Labeled Use Rates**

Celsius Use Rates	oz/1000 sq ft	grams/1000 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 Rate\Mix size	Amount of Celsius WG to use per mix size				
	1 gallons	2 gallons	3 gallons	4 gallons	5 gallons
Low	½ teaspoon	1 teaspoon	1.5 teaspoons	2 teaspoons	2.5 teaspoons
Middle	¾ 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 from measuring cone**

Rate of Celsius\Mix size	oz Celsius per mix 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 measuring cone equivalents**

Rates on Celsius WG 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.



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**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.

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Net Contents: [Various (10 oz. or up to 10 lb)]

PRODUCED FOR



**Bayer Environmental Science**

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