CELSIUS®

WG Herbicide

envu™

THIENCARBAZONE-METHYL IODOSULFURON DICAMBA	GROUP	2 2 4	HERBICIDE

A Herbicide for the Postemergence 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%

CELSIUS® WG HERBICIDE is formulated as a 68% water dispersible granule
*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. 101563-141 **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.)
See Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-424-9300
For PRODUCT USE Information Call 1-800-331-2867

Produced for
Environmental Science U.S., LLC
5000 CentreGreen Way, Suite 400
Cary, NC 27513
Product of Germany

Annual and Perennial Broadleaf Weeds and Grasses

79714858
81769664G 221216AV1
Net Contents:
10 Oz (283.5 Gr)

(01)08101121001517

CELSIUS®

WG Herbicide

THIENCARBAZONE-METHYL IODOSULFURON DICAMBA	GROUP	2 2 4	HERBICIDE

A Herbicide for the Postemergence 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%

Celsius® WG HERBICIDE is formulated as a 68% water dispersible granule

*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. 101563-141 **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.)

See Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-424-9300
For PRODUCT USE Information Call 1-800-331-2867

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. • Have person sip a glass of water if able to swallow. • DO NOT give anything by mouth to an unconscious person.

For MEDICAL Emergencies Call 24 Hours A Day 1-800-424-9300. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

79714858
81769664G 221216AV1
Net Contents:
10 Oz (283.5 Gr)

Produced for
Environmental Science U.S., LLC
5000 CentreGreen Way, Suite 400
Cary, NC 27513
Product of Germany

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed.

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.

GROUNDWATER ADVISORY

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

SURFACE WATER ADVISORY

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 for weeks 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 iodosulfuron-methyl-sodium from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

NON-TARGET ORGANISM ADVISORY

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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 must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING

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.

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. • Have person sip a glass of water if able to swallow. • DO NOT give anything by mouth to an unconscious person.

For MEDICAL Emergencies Call 24 Hours A Day 1-800-424-9300. 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (except for applicators using ground boom 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

Users should:

- Wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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.

GROUNDWATER ADVISORY

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

SURFACE WATER ADVISORY

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 for weeks 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 iodosulfuron-methyl-sodium from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

NON-TARGET ORGANISM ADVISORY

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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.

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.

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 (postemergence) 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). This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas

adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

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 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 herbicides with different modes of action (MOA) reduces the probability that resistant biotypes to CELSIUS WG HERBICIDE will develop.

WEED RESISTANCE MANAGEMENT

For resistance management, CELSIUS WG HERBICIDE contains Group 2 and Group 4 herbicides. Any weed population may contain or develop plants naturally resistant to this product. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed. To delay herbicide resistance take one or more of the following steps:

- Rotate the use of CELSIUS WG HERBICIDE or other Group 2 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use, and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: 1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; 2) a spreading patch of noncontrolled plants of a particular weed species; 3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific weed biotypes.

TURF TOLERANCE

This product has been tested and can be used on the following types of turfgrass and their cultivars:
St. Augustinegrass (Floratam, Palmetto, Bitter Blue, Common, Amerishade, Raleigh, Sapphire, Delmar, Captiva)
Bermudagrass (Tifway 419, Common, Tifsport, Discovery, Celebration, Sahara)
Centipedegrass (Tifblair)
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 must 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.

- 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 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.

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. The maximum single application rate is 4.9 oz product/A. 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).
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 volume 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 ASABE S572.1. 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 must 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/recirculate 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 HERBICIDE prior to overseeding. Allow a minimum of 14 days between broadcast application of CELSIUS WG HERBICIDE 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. 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.

TANK MIX PARTNERS

CELSIUS WG HERBICIDE may be used in combination with Revolver® Herbicide (432-1266, foramsulfuron), Sencor® 75% Turf Herbicide (432-1469, metribuzin), Prograss® SC Herbicide (432-1462, ethofumesate), Ronstar® FLO Herbicide (432-1465, oxadiazon), Acclaim® Extra Herbicide (432-950, fenoxaprop-p-ethyl), and Specticle® FLO (432-1608, indaziflam), for 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, or pyraflufen-ethyl.

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 products. Evaluate these tank mixtures in a limited area before widespread applications.

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. Not all products are registered in all states; please verify state registration of these products in your state before selling, distributing, or using.

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

Footnotes:

The single maximum application rate of 4.9 oz of product per acre correlates to 0.027 lb thiencarbazone-methyl, 0.006 lb iodosulfuron-methyl-sodium, and 0.18 lb dicamba per acre.

The maximum annual application rate of 7.4 oz of product per acre per year correlates to 0.04 lb thiencarbazone-methyl, 0.009 lb iodosulfuron-methyl-sodium, and 0.27 lb dicamba per acre.

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

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 falsedandelion	*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	*Ipomoea*	*lacunosa*
Quackgrass	*Agropyron*	*repens*
Rabbitfoot clover	*Trifolium*	*arvense*
Red sorrel	*Rumex*	*acetosella*
Redroot pigweed	*Amaranth*	*retroflexus*
Shattercane	*Sorghum*	*bicolor*
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 0.085 oz (2.4 g) of product per 1,000 sq ft

Common Name	Genus	Species
American burnweed, Fireweed	*Erechtites*	*hieraciifolia*
Asiatic hawksbeard	*Youngia*	*japonica*
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*

continued

Common Name	Genus	Species
Corn speedwell	*Veronica*	*arvensis*
Creeping speedwell	*Veronica*	*filiformis*
Dalligrass**	*Paspalum*	*dilatatum*
Dogfennel	*Eupatorium*	*capillifolium*
Dollarweed, Pennywort*	*Hydrocotyle*	Spp.
Entireleaf morningglory	*Ipomoea*	*hederacea var. integriuscula*
Facelis, trampweed	*Facelis*	*retusa*
Fall panicum	*Panicum*	*dichotomiflorum*
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*
Horseweed, marestail	*Conza*	*canadensis*
Ivyleaf morningglory	*Ipomoea*	*hederacea*
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*
Thin paspalum, bull paspalum*	*Paspalum*	*setaceum*
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*
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*	*sanquinalis*
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 is best controlled at early growth stages as described above. 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

Amount of CELSIUS WG HERBICIDE to use per mix size					
CELSIUS WG HERBICIDE Rate \ Mix size	**1 gallon**	**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 HERBICIDE from measuring cone

	oz CELSIUS WG HERBICIDE per mix size			
Rate of CELSIUS WG HERBICIDE \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 HERBICIDE measuring cone equivalents

Rates on CELSIUS WG HERBICIDE measuring cone in oz	Equals	Rate	Mix size
0.17	=	Low rate	3 gallons
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.

MANDATORY SPRAY DRIFT

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- DO NOT apply when wind speeds exceed 10 miles per hour at the application site.
- DO NOT apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use a Medium or Coarser droplet size (ASABE S572.1) for all applications.
- DO NOT apply when wind speeds exceed 10 miles per hour at the application site.
- DO NOT apply during temperature inversions.

Spray Drift Advisory

Boom-less Ground Applications:

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

- Take precautions to minimize spray drift.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

WINDBLOWN SOIL PARTICLES: CELSIUS WG HERBICIDE has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying CELSIUS WG HERBICIDE if prevailing local conditions may be expected to result in off-site movement.

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.

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 must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING

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.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

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. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Environmental Science U.S., LLC. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ENVIRONMENTAL SCIENCE U.S., LLC 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 Environmental Science U.S., LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ENVIRONMENTAL SCIENCE U.S., LLC 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 ENVIRONMENTAL SCIENCE U.S., LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.