



U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg  
Number:

432-1404

Date of Issuance:

JUN 26 2006

Term of Issuance: Conditional

Name of Pesticide Product:

Iodosulfuron Turf

NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Bayer Environmental Science  
2 T.W. Alexander Dr.  
Research Triangle Park, NC 27709

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

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

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

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided you agree in writing to:

1. Submit the outstanding data requirements 830.6317 Storage Stability and 830.6320 Corrosion Characteristics within one year from the data of this letter.
2. Add an appropriate EPA Establishment number to the label.
3. Change the Registration Number from 432-RUNU to **432-1404**.

Signature of Approving Official:

James Tompkins, Product Manager (25)  
Herbicide Branch, Registration Division (7505P)

Date:

JUN 26 2006

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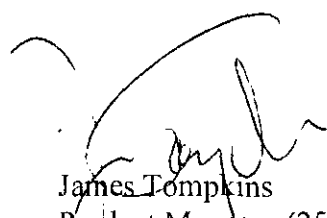
EPA Reg. No. 432-1404

4. Under the ENVIRONMENTAL HAZARDS section, change the statement "This product is toxic to non-target plant" to "This product is toxic to non-target **plants.**"
5. Remove "or an aircraft smoke generator" from the section TEMPERATURE INVERSIONS on page 3.
6. Change the heading "WEED CONTROL AND TRANSITION RECOMMENDATIONS" to "WEED CONTROL AND TRANSITION **USES**"
7. Remove statement "weed control recommendation table" and replace with "**Use Rates For Weed Control section**" on page 4 in the subsections Ryegrass: Transition to Bermudagrass, Volunteer Ryegrass, and General Weed Control.
8. Change the heading "USE RATE FOR WEED CONTROL" to "**USE RATES FOR WEED CONTROL**" on page 5.
9. On page 5, revise the statement "Careful management of spray drift and tank cleanout" to "**Carefully manage** spray drift and tank cleanout."
10. On page 6, in #11 of the Precautions For Use section, revise the buffer from 15 feet to **25 feet.**
11. On page 6, remove "Ronstar G" from the trademarks section, as this tank mix is not allowed.

The basic formulation CSF [dated 1/6/2006] and the alternate formulation CSF [dated 12/6/2005] of the product referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act are acceptable. The basic and alternate CSFs will be added to your file.

You will submit one (1) copy of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). A stamped copy of labeling is enclosed for your records.

If you have any questions, please contact Hope Johnson at 703-305-5410.



James Tompkins  
Product Manager (25)  
Herbicide Branch  
Registration Division (7505P)

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# IODOSULFURON TURF HERBICIDE

A Herbicide for Control of Annual and Perennial Broadleaf Weeds and Grasses in Bermudagrass, Zoysiagrass, St. Augustinegrass, Centipedegrass, Kikuyugrass, and Kentucky Bluegrass

<b>ACTIVE INGREDIENTS:</b> Iodosulfuron* (CAS Number 144550-36-7).....	10.00%
<b>OTHER INGREDIENTS:</b> .....	90.00%
*Iodosulfuron is formulated as a 10% water dispersible granule (WDG)	
and Protected by U.S. Patent No 5,688,745	
<b>TOTAL: 100.00%</b>	

EPA Reg No. 432-RUNU

E.P.A. Est. No.

## 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 1-800-334-9745

For **MEDICAL And TRANSPORTATION Emergencies ONLY** Call 24 Hours A Day 1-800-334-7577

### FIRST AID

<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<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>
For <b>MEDICAL Emergencies</b> 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

Harmful if inhaled. Avoid breathing dust. Causes moderate eye irritation. Avoid contact with eyes or clothing.

#### 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.

#### 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

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

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

JUN 26 2006

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

432-1404

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## ENVIRONMENTAL HAZARDS

This product is toxic to non-target plant. 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. Do not drain or rinse equipment near desirable vegetation.

## 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 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 over long-sleeved shirt and long pants, socks and shoes and chemical-resistant gloves made of any waterproof material.

## NON-AGRICULTURAL USE REQUIREMENTS

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

### 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

Empty containers should be triple rinsed (or equivalent), then offered for recycling or reconditioning; or puncture and disposed of in a sanitary landfill, or by incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

## GENERAL INFORMATION

### Uses

Iodosulfuron Herbicide is a postemergent sulfonyl herbicide for application as a foliar spray. Iodosulfuron is intended for professional use on golf course turf, sports fields, commercial lawns, cemeteries, parks, campsites, recreational areas, home lawns, roadsides, school grounds, and sodfarms to control cool season grasses and broad leaf weeds in tolerant grasses.

### Symptoms

Weed growth ceases within hours after application. Symptoms progress from yellowing to necrosis resulting in plant death within 1-4 weeks after application.

### Turf Tolerance

Iodosulfuron Turf Herbicide has been tested and can be used on the following turfgrass cultivars: Bermudagrass, Zoysiagrass, St. Augustinegrass, Centipedegrass, Kentucky Bluegrass, and Kikuyugrass. Other turfgrasses and their cultivars may be tolerant to iodosulfuron. Tolerance testing, however, should be done prior to use.

Ryegrass and bahiagrass are intolerant to iodosulfuron.

### **Application Methods, Mixing, and Compatibility**

Uniform, thorough spray coverage is important to achieve consistent weed control. Select spray nozzles and pressure that deliver 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.

### **Application**

Iodosulfuron Turf Herbicide may be applied as a broadcast treatment in a minimum of 25 gallons of water per acre. For weed control in dense weed populations, control of weeds under adverse growing conditions, or control of mature weeds, higher spray volumes up to 60 gallons per acre are recommended. Rates for specific weeds are listed in the weed control recommendation table.

**SPRAY DRIFT MANAGEMENT:** Iodosulfuron 10% Herbicide is not volatile. 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:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind 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 determine 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, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

**INFORMATION ON DROPLET SIZE:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions below). Uniform, thorough spray coverage is important to achieve consistent weed control. Select nozzles and pressure that deliver 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.

**CONTROLLING DROPLET SIZE:** Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. • Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure. • Number of nozzles - Use the minimum number of nozzles that provide uniform coverage. • Nozzle Orientation. Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

**APPLICATION HEIGHT:** To minimize spray drift with ground boom applications, apply with nozzle height no more than 4 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.

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

### **Spray Solution pH**

The efficacy of Iodosulfuron Turf Herbicide may be affected by the pH of the spray solution. A pH near 7.0 is ideal. If the pH is less than 6, add a suitable buffer.

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### Mixing Instructions

Iodosulfuron Turf Herbicide must be applied with clean and properly calibrated equipment. Prior to adding Iodosulfuron Turf Herbicide, ensure that the spray tank, filters and nozzles have been thoroughly cleaned.

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

### Compatibility

If Iodosulfuron Turf Herbicide is to be tank-mixed with other pesticides not listed specifically on this label, 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.

## WEED CONTROL AND TRANSITION RECOMMENDATIONS

### RYEGRASS: TRANSITION TO BERMUDAGRASS

Iodosulfuron Turf Herbicide may be applied to Bermudagrass for removal of ryegrass during the spring transition. Treatments should be applied when Bermudagrass has resumed active growth and removal of ryegrass is desired. Rate and temperature will influence the speed of removal. Higher labeled rates and warmer spring temperatures will result in faster removal. The best time for application within the transition period will vary by location. Addition of nitrogen fertilizer in the tank mixture at the time of application may improve turf quality by increasing Bermudagrass growth during the transition. Rates are listed in the weed control recommendation table.

### VOLUNTEER RYEGRASS

Iodosulfuron Turf Herbicide may be used to remove clumps of ryegrass from tolerant turf. Herbicide rate and temperature will influence the speed of removal. Higher labeled rates and air temperatures will result in quicker removal. Rates are listed in the weed control recommendation table.

### GENERAL WEED CONTROL

Iodosulfuron Turf Herbicide may be used to control a variety of broad leaf weeds and grasses in tolerant turf. Susceptible weeds are listed in the weed control recommendation table. In some cases, a second application, 4-6 weeks later, may be needed for complete weed control. A second application must not exceed the total amount of product allowed per acre in a calendar year.

### BERMUDAGRASS OVERSEEDED WITH RYEGRASS

Bermudagrass may be treated with Iodosulfuron Turf Herbicide prior to overseeding. Allow 8 weeks or more between the application of Iodosulfuron Turf Herbicide and overseeding with ryegrass. Intervals less than 8 weeks may cause undesirable reductions in the stand of ryegrass. Iodosulfuron Turf Herbicide may be used in conjunction with an application of Ronstar prior to overseeding for post emergent and pre emergent weed control. Follow the most restrictive application interval prior to ryegrass overseeding (8 weeks) on each label.

### TANK MIX RECOMMENDATIONS FOR IODOSULFURON TURF HERBICIDE

Iodosulfuron Turf Herbicide may be used in combination with Revolver Herbicide, Sencor Herbicide, Prograss Herbicide, and Ronstar WSP Herbicides for post emergent control of many grasses and broad leaf weeds. When using Iodosulfuron Turf Herbicide, follow the precautions and directions of both labels. When using other tank mixtures with Iodosulfuron Turf Herbicide, test physical and biological compatibility prior to use.

### 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.

### USE RATE FOR WEED CONTROL

**0.43 oz product/Acre (0.01 oz product/1000 sq. ft.)**

Ryegrass  
 Dandelion  
 False (cat's ear) dandelion  
 Virginia dwarf dandelion  
 White clover  
 Hop clover  
 Bur clover  
 Rabbit's foot clover  
 Common chickweed  
 Buttercup  
 Red sorrel  
 Curly dock  
 Wild violet  
 Henbit  
 Cutleaf evening primrose  
 Wild onion  
 Wild garlic  
 Hairy bittercress  
 Venus looking glass  
 Oldfield toadflax  
 Shepherd's purse  
 Bird's-eye pearlwort  
 Tansy mustard  
 Knawel  
 Pokeweed  
 Carpetweed  
 Black medic  
 Creeping speedwell  
 Maretail  
 Common lespedeza  
 Ground ivy

**0.72 oz Product/Acre (0.016 oz product/1000 sq. ft.)**

Mouse-eared chickweed  
 Paleseed plantain  
 Field pepperweed

**1.43 oz Product /Acre (0.033 oz product/1000 sq. ft.)**

Wood sorrel  
 Buckhorn plantain  
 Wild carrot  
 Heath aster  
 Poorjoe

### PRECAUTIONS FOR USE

1. DO NOT apply more than a total of 1.43 oz of product per acre (0.009 lbs AI/A) per calendar year.
2. Rainfall within 2 hours may necessitate retreatment with Iodosulfuron Turf Herbicide and may result in reduced weed control. However, do not exceed 0.009 lbs AI/A per year. Make applications to actively growing weeds. 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. DO NOT apply when wind causes drift to off-site vegetation, as injury may occur. Small amounts of Iodosulfuron Turf Herbicide delivered via drift or spray tank combinations can damage other plants. Careful management of spray drift and tank cleanout.
4. DO NOT apply this product by air or through any type of irrigation system.
5. Apply Iodosulfuron Turf Herbicide spray mixtures within 24 hours of mixing to avoid product degradation.
6. DO NOT apply Iodosulfuron Turf Herbicide on turf exhibiting injury from previous applications of other products.

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7. DO NOT apply Iodosulfuron Turf Herbicide within 4 weeks of Bermudagrass sprigging.
8. Avoid excessive mechanical disruptions such as aerification and verticutting within 1 week prior to or after application.
9. Do NOT apply to turf less than 1 year old.
10. Do NOT plant ornamentals in treated areas for at least 1 year after the last application, or bedding plants for at least 2 years
11. In order to minimize risk to non-target plants, do not apply when the wind direction is toward sensitive areas (bodies of water, known habitats for threatened or endangered plants, areas designated for ecological preservation) that are immediately adjacent to the treatment area and leave a 15 ft buffer between the application area and an adjacent sensitive area.

### 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 should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Turf injury, 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:** 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. BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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Sencor, Ronstar WSP, Ronstar G, and Prograss are registered trademarks of Bayer AG.

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**Net Content :**

PRODUCED FOR



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IODOSULFURON Turf Herbicide (PENDING) Submitted 05/04/06, Resubmitted 06/19/06