

7969-150

05/05/2005

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

MAY - 5 2005

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Melvin M. Graben
BASF Corporation
P.O. Box 13528
Research Triangle Park, NC 27709-3528

Dear Mr. Graben:

Subject: Add Conservation Reserve Programs (CRP) and Aerial Application
[Overdrive Herbicide]
Distinct Herbicide
EPA Registration No. 7969-150
Your Submission Dated April 29, 2004

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. In the Environmental Hazards Section delete "Keep out of lakes, streams and ponds" and "For terrestrial uses,". Refer to PR Notice 93-8. This statement is only appropriate for pesticides which bear directions for direct application to aquatic sites.
 - b. Rangeland and Pastures are not subject to the Worker Protection Standard (WPS) and should be included in the Non-Agricultural Use Requirements section.
 - c. On page 6 in the Application instructions delete "should be applied" concerning application with water. This implies this product can be applied without water which is contrary to the directions for use on the labeling.
 - d. In the CRP Supplemental Label delete the crop rotation statement. This restriction appears to be contrary to CRP contracts that specify that the land will remain fallow for a specific period of time.

e. Modify the CRP Supplemental Label to include the following:

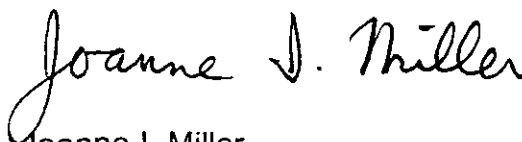
The labeling must be in the possession of the user at the time of application. Read the label affixed to the container for Overdrive Herbicide before applying. Use of Overdrive Herbicide according to this supplemental labeling is subject to the use precautions and limitations imposed by the label affixed to the container for Overdrive Herbicide.

3. This registration expires on December 31, 2005.

4. 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). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,



Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

3/18

overdrive[®]
herbicide

**Supplemental
Labeling**

EPA Reg. No. 7969-150

**FOR AERIAL APPLICATION AND USE ON
CONSERVATION RESERVE PROGRAM LANDS**

**ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAY - 5 2005**

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

**OBSERVE ALL PRECAUTIONARY STATEMENTS IN THE OVERDRIVE
HERBICIDE LEAFLET LABEL BEFORE USING. SEE THE OVERDRIVE
LEAFLET LABEL FOR USE AREA, MIXING AND APPLICATION
INFORMATION AND WEEDS CONTROLLED.**

7969-150

DIRECTIONS FOR USE

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

DO NOT apply this product through any type of irrigation system.

APPLICATION INSTRUCTIONS

Best product performance is obtained when **Overdrive**[®] herbicide is applied to actively growing weeds. **Overdrive** may be applied as a ground broadcast, spot spray application, or an aerial application at a rate of 4-8 ounces per acre plus spray additive (see leaflet label, Section III. **Rates and Additives**). To avoid uneven spray coverage, **Overdrive** should not be used during periods of gusty winds or when wind speeds exceed 10 mph. As a wettable granule formulation, **Overdrive** should be applied using water as the spray carrier. Aerial applications of **Overdrive** should be applied using water as the spray carrier.

**MANAGING OFF-TARGET
MOVEMENT**

Spray Drift:

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.

Spray drift from application equipment or the use of poorly cleaned equipment may cause injury to desirable broadleaf trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, and other broadleaf plants when contacting their roots, stems, or foliage. These plants are most sensitive to **Overdrive** during their development or growing stage.

Only apply this product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or non-target crops) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, and temperature inversions.

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

The best drift management strategy and most effective way to reduce drift potential are to apply large 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**).

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 - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- 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. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift. **DO NOT** use nozzles producing a mist droplet spray.

Application Height: Making applications at the lowest possible height (aircraft, ground driven spray boom) that is safe and practical reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should

increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind: Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Overdrive® herbicide should not be applied during periods of gusty wind or when wind speed exceeds 10 mph as uneven spray coverage may occur.

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.

Temperature Inversions: Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud, which 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.

Wind Erosion: Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Aerial Application Methods and Equipment: Use 2 or more gallons of water per acre. Select nozzles designed to produce minimal amounts of fine spray particles.

The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift. Make aerial applications at the lowest safe height to reduce exposing the spray to evaporation and wind.

Managing spray drift from aerial applications: Applicators must follow these requirements to avoid off-target drift movement: 1) boom length - the distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor, 2) nozzle orientation - nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees, and 3) application height - without compromising aircraft safety, applications should be made at a height of 10 feet or less above the crop canopy or tallest plants. Applicators must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Ground Application (Broadcast): Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift. Use higher water volumes when treating dense or tall vegetation.

GENERAL TANK MIXING INFORMATION

Overdrive® herbicide may be used alone or tank mixed with other herbicides listed in Table 2 of the leaflet label for additional weed control and may be applied by either ground or aerial methods. Tank mix recommendations are for use only in states where the tank mix product, application site, and application method are registered.

Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

GENERAL RESTRICTIONS AND LIMITATIONS

Threatened and Endangered Species: To ensure the protection of known populations of threatened and endangered plants when applying **Overdrive**:

1. Federal agencies must follow NEPA regulations to ensure protection of threatened and endangered plants.
2. State agencies must work with the Fish and Wildlife Service or the Service's designated state conservation agency to ensure protection of threatened and endangered plants.
3. Other organizations or individuals must operate under a Habitat Conservation Plan if threatened or endangered plants are known to be present on the land to be treated.

Overdrive should only be applied when the potential for drift to known populations of threatened or endangered plant species is minimal (e.g. when wind is blowing away from the sensitive area).

CONSERVATION RESERVE PROGRAMS

Overdrive may be used in established grass stands in Conservation Reserve Programs (CRP) or federal Set-Aside Programs for post-emergence broadleaf weed control (see **Table 1** of the leaflet label for listed weed species). A maximum of 8 ounces of **Overdrive** can be applied per season per treated acre in conservation reserve programs. **Overdrive** may be used alone or in combination with other CRP-labeled herbicides to enhance the control of perennial weeds or complement the spectrum of weeds controlled. See **Table 2** of leaflet label (Tank mix options) for additional information on tank mixes.

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CONSERVATION RESERVE PROGRAMS (Continued)

DO NOT apply **Overdrive**[®] herbicide to newly seeded grasses. Established grasses growing under environmental stresses can exhibit various injury symptoms that may be more pronounced if herbicides are applied. **Overdrive** may injure bentgrass, carpetgrass, buffalograss, St. Augustine, and velvetgrass. **Overdrive** will severely injure alfalfa, clovers, lespedeza, wild winter peas, vetch and other legumes.

Crop Rotation Restriction

DO NOT plant crops within 120 days after the last application of **Overdrive**, with the following exceptions. If at least 1 inch of rainfall or overhead irrigation is received following the last application of **Overdrive** (less than or equal to 4 ounces per acre only); alfalfa, cereal grain crops, cotton, grain sorghum and soybeans may be planted following 30 days after the rainfall/irrigation event in all states except California. In the event of crop failure, corn can be replanted 7 or more days after application.

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Overdrive is a registered trademark of BASF.

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Supersedes: NVA 2004-04-078-0025

BASF Corporation
Agricultural Products
26 Davis Drive
Research Triangle Park, NC 27709

 **BASF**

The Chemical Company

ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAY - 5 2005
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

7969-150

overdrive[®]

herbicide

For broadleaf weed control in noncropland sites, conservation reserve programs, pasture, hay, and rangeland

Active Ingredient:

Sodium salt of diflufenzopyr: 2-(1-[[[3,5-difluorophenylamino] carbonyl]-hydrazono]ethyl)-3-pyridinecarboxylic acid, sodium salt*	21.4%
Sodium salt of 3,6-dichloro- <i>o</i> -anisic acid**	55.0%

Inert Ingredients: 23.6%

Total 100.0%

* This product contains 20% 2-(1-[[[3,5-difluorophenylamino] carbonyl]-hydrazono]ethyl)-3-pyridinecarboxylic acid (diflufenzopyr) or 0.20 pounds acid equivalent per pound of product.

** This product contains 50% 3,6-dichloro-*o*-anisic acid or 0.50 pounds acid equivalent per pound of product.

EPA Reg. No. 7969-150

EPA Est. No. _____

KEEP OUT OF REACH OF CHILDREN.

CAUTION! PRECAUCIÓN!

See inside for additional **First Aid, Precautionary Statements, Directions for Use and Conditions of Sale and Warranty**

NET CONTENTS: _____

BASF Corporation
Agricultural Products
26 Davis Drive
Research Triangle Park, NC. 27709

 **BASF**
The Chemical Company

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).	

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical resistant gloves category A.
- Shoes plus socks.

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

User Safety Recommendations

Users should:

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

Engineering Controls Statement

When handlers use closed systems, enclosed cabs, or aircraft 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.

Environmental Hazards

Keep out of lakes, streams, or ponds. For terrestrial uses, **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters. This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Ground and Surface Water Protection

Point source contamination: To prevent point source contamination, do not mix, load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. **DO NOT** apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Point source contamination: (Continued)

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil:

DO NOT apply under conditions which favor runoff.

DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. **DO NOT** apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow application rate recommendations.

Movement by water erosion of treated soil: DO NOT

apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

Endangered Species Concerns

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

Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

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

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of **12 hours**.

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

- Coveralls.
- Chemical resistant gloves category **A**.
- Shoes plus socks.

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 (WPS) 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.

Noncropland weed control is not within the scope of the Worker Protection Standard. See **section I**.

General Information of this label for a description of noncropland sites.

DO NOT enter treated areas without protective clothing until sprays have dried.

All applicable directions, restrictions, precautions and **Conditions of Sale and Warranty** are to be followed.

Storage and Disposal

DO NOT contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store product in original container only. Store product in a cool, dry place. **DO NOT** store this product under wet conditions. Avoid cross-contamination with other pesticides.

Pesticide Disposal: Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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Container Disposal:

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling 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. **DO NOT** re-use container

In Case of Emergency

In case of large-scale spillage regarding this product, call:

CHEMTREC 1-800-424-9300
BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment.
- Your local poison control center (hospital).
- BASF Corporation (1-800-832-HELP [4357])

I. General Information

Overdrive® herbicide is a selective postemergence herbicide for the control of annual and biennial broadleaf weeds and control or suppression of many perennial broadleaf weeds in noncropland sites, conservation reserve programs, pasture, hay, and rangeland sites. Examples of noncropland sites include, but are not limited to railroad, utility, pipeline and highway rights-of-way, railroad crossings, utility plant sites, petroleum tank farms, pumping installations, nonagricultural fencerows, and airports.

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Table 1. General Weed List, Including ALS - and Triazine-Resistant Biotypes

Annual Weeds	Annual Weeds (CONT)	Perennial Weeds
Amaranth, Palmer, Powell, Spiny	Purslane, Common	Alfalfa
Aster, Slender	Pusley, Florida	Bindweed, Field, Hedge
Bedstraw, Catchweed, Marsh	Radish, Wild	Buckbrush
Beggarweed, Florida	Ragweed, Common, Giant	Buttercup, Bulbous, Creeping
Broomweed, Common	(Buffaloweed), Lance-Leaf	Clover, White
Buckwheat, Wild	Sesbania, Hemp	Clematis
Buffalobur	Shepherdspurse	Daisy, Oxeye
Burcucumber	Sicklepod	Dandelion, Common
Buttercup, Corn, Hairy, Roughseed,	Sida, Prickly (Teaweed)	Dock, Broadleaf, Curly
Western Field	Smartweed, Green, Pennsylvania	Dogbane, Hemp
Carpetweed	Smellmelon	Dogfennel (Cypressweed)
Catchfly, Nightflowering	Sneezeweed, Bitter	Goldenrod, Canada, Missouri, Rigid
Chamomile, Corn	Sorrel, Heartwing	Horsenettle, Carolina
Chickweed, Common	Sowthistle, Annual, Spiny	Lespedeza, Sericea ²
Clovers, Annual	Spurge, Prostrate	Milkweed, Common, Honeyvine
Cockle, Corn, Cow	Spurry, Corn	Nightshade, Silverleaf
Cocklebur, Common	Starbur, Bristly	Plantain, Broadleaf, Buckhorn
Croton, Tropic, Woolly	Sumpweed, Rough	Pokeweed
Daisy, English	Sunflower, Common (Wild)	Ragweed, Western
Devil's Claw	Thistle, Russian	Sensitivebiar, Catclaw
Eveningprimrose, Cutleaf	Velvetleaf	Skeletonweed, Rush
Fleabane, Annual, Hairy	Waterhemp, Common, Tall	Smartweed, Swamp
Flixweed	Waterprimrose, Winged	Sneezeweed, Common
Geranium, Carolina	Wormwood	Sowthistle, Perennial
Goosefoot, Nettleleaf	Vetch, Hairy	Thistle, Canada
Henbit		Yankee weed
Hopclover, Large, Small		Yarrow, Common
Jimsonweed		
Knotweed, Prostrate		
Kochia		
Ladysthumb		
Lambsquarters, Common		
Lespedeza, Common		
Lettuce, Prickly		
Madder, Field		
Mallow, Venice		
Marestail (Horseweed)		
Mayweed		
Morningglory, Entireleaf, Ivyleaf,		
Pitted, Smallflower, Tall		
Mustard, Tall, Tansy, Wild,		
Yellowtops		
Nightshade, Black, Eastern Black,		
Hairy		
Pennycress, Field		
Pepperweed, Virginia		
Pigweed, Prostrate,		
Redroot (Carelessweed), Rough,		
Smooth, Spiny, Tumble		
Pineappleweed		
Poorjoe		
Puncturevine		
	Biennial Weeds	
	Burdock, Common	
	Carrot, Wild (Queen Anne's Lace)	
	Cockle, White	
	Eveningprimrose, Common	
	Gromwell	
	Hemlock, Poison	
	Knapweed, Diffuse, Spotted ¹	
	Mallow, Dwarf	
	Parsnip, Wild	
	Plantain, Bracted	
	Ragwort, Tansy	
	Starthistle, Yellow	
	Sweetclover	
	Teasel	
	Thistle, Musk, Plumeless, Bull,	
	Scotch	

¹ Rosette stage only

² Suppression only

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Mode of Action

Overdrive® herbicide is absorbed by leaves, roots, and shoots and translocated to the growing points of sensitive weeds to provide postemergence control of emerged weeds as well as moderate residual control of germinating weeds. **Overdrive** controls weeds by auxin transport inhibition and auxin agonist modes of action. In addition, **Overdrive** can complement the activity of other auxin-like herbicides such as triclopyr, picloram and clopyralid.

Weeds treated with **Overdrive** will typically display symptoms within several hours and be controlled in 3-7 days. Control of larger annual, biennial, or perennial weeds may require additional time. Treated weeds will stop growing soon after application. Broadleaf weeds will display epinastic twisting and crinkling symptoms before becoming necrotic.

Coverage

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

Cleaning Spray Equipment

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and triple rinsing the equipment before and after applying this product.

II. Application Instructions

Best product performance is obtained when **Overdrive** is applied to actively growing weeds. **Overdrive** may be applied as a ground broadcast, spot spray application, or an aerial application at a rate of 4-8 ounces per acre plus spray additive (see section III. Rates and Additives). To avoid uneven spray coverage, **Overdrive** should not be used during periods of gusty winds or when windspeeds exceed 10 mph. As a wettable granule formulation, **Overdrive** should be applied using water as the spray carrier. Aerial applications of **Overdrive** should be applied using water as the spray carrier.

MANAGING OFF-TARGET MOVEMENT

Spray Drift:

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.

Spray drift from application equipment or the use of poorly cleaned equipment may cause injury to desirable broadleaf trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, and other broadleaf plants

when contacting their roots, stems, or foliage. These plants are most sensitive to **Overdrive** during their development or growing stage.

Only apply this product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or non-target crops) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions.

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

The best drift management strategy and most effective way to reduce drift potential are to apply large 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**).

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** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **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. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift. **DO NOT** use nozzles producing a mist droplet spray.

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Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground)

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upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind: Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Overdrive® herbicide should not be applied during periods of gusty wind or when windspeed exceeds 10 mph as uneven spray coverage may occur.

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.

Temperature Inversions: Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud, which 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.

Wind Erosion: Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Aerial Application Methods and Equipment: Use 2 or more gallons of water per acre. Select nozzles designed to produce minimal amounts of fine spray particles. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift. Make aerial applications at the lowest safe height to reduce exposing the spray to evaporation and wind.

Managing spray drift from aerial applications: Applicators must follow these requirements to avoid off-target drift movement: 1) boom length - the distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor, 2) nozzle orientation - nozzles must always

point backward parallel with the air stream and never be pointed downwards more than 45 degrees, and 3) application height - without compromising aircraft safety, applications should be made at a height of 10 feet or less above the crop canopy or tallest plants. Applicators must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Ground Application (Broadcast): Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift. Use higher water volumes when treating dense or tall vegetation.

III. Rates and Additives

Rate

Use 4-8 ounces of **Overdrive** per acre. Use higher rates when treating large annual and biennial weeds or when treating perennial weeds. A maximum of 10 ounces of **Overdrive** can be applied per season per treated acre in noncropland sites. A maximum of 8 ounces of **Overdrive** can be applied per season per treated acre in conservation reserve programs, pasture, hay, and rangeland sites.

Adjuvants must be used with **Overdrive** to achieve consistent weed control.

Nonionic Surfactant

The standard label recommendation is 1 quart of an 80% active nonionic spray surfactant per 100 gallons of water.

OR

Methylated Seed Oil

Methylated vegetable-based seed oil concentrate may be used at the rate of 1.5 to 2 pints per acre. When using spray volumes greater than 30 gallons per acre, methylated seed oil or vegetable based seed oil concentrates should be mixed at a rate of 1% of the total spray volume. Methylated seed oils may aid in deposition and uptake of **Overdrive** for hard-to-control perennials, waxy leaf species or when plants are under moisture or temperature stress.

Compatibility Test for Mix Components

Add components in the following sequence using 2 teaspoons for each pound of dry product or 1 teaspoon for each pint of liquid product of recommended label rate per acre (EXAMPLE: 1 teaspoon for an 8 oz/A rate of **Overdrive**).

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Compatibility Test for Mix Components (Continued)

- 1) **Water:** For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) **Water-dispersible products:** - (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) Cap the jar and invert 10 cycles.
- 3) **Water-soluble products:** such as **Overdrive® herbicide.** Cap the jar and invert 10 cycles.
- 4) **Emulsifiable concentrates:** Cap the jar and invert 10 cycles.
- 5) **Water-soluble additives:** (i.e. Nonionic surfactant) Cap the jar and invert 10 cycles.
- 6) Let the solution stand for 15 minutes.
- 7) **Evaluate** the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

IV. Mixing Order

- 1) **Water:** Begin by filling a thoroughly clean sprayer tank half full of clean water.
- 2) **Water-dispersible products:** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
- 3) **Water-soluble products:** such as **Overdrive,** allow granules to saturate
- 4) Begin agitation
- 5) **Emulsifiable concentrates**
- 6) **Water-soluble additives** (i.e. Nonionic surfactant)
- 7) Remaining quantity water

Maintain constant agitation during application. If foaming occurs use an agriculturally approved de-foaming agent. For more information, refer to **section V. General Tank Mixing Information.**

V. General Tank Mixing Information

Overdrive may be used alone or tank mixed with other herbicides listed in **Table 2** for additional weed control and may be applied by either ground or aerial methods. Tank mix recommendations are for use only in states where the tank mix product, application site, and application method are registered.

Read and follow the applicable **Restrictions and Limitations and Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Overdrive** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers.

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Table 2. Tank Mix Options

Herbicide	Recommendation
picloram (Tordon [®] , Grazon [®] P+D)	For noncropland, pasture and rangeland: To complement weed spectrum or increase weed control, add 4 oz/A of Overdrive[®] herbicide in tank mixtures with picloram.
triclopyr (Garlon [®] 3A, Garlon [®] 4, Remedy [®])	For noncropland, pasture and rangeland: To complement weed spectrum or increase weed control, add 4 oz/A of Overdrive in tank mixtures with triclopyr.
clopyralid (Transline [®] , Stinger [®] , Redeem [®])	For noncropland, pasture and rangeland: To complement weed spectrum or increase weed control, add 4 oz/A of Overdrive in tank mixtures with clopyralid.
fluroxypyr ¹ (Vista [®])	For noncropland only: To complement weed spectrum or increase weed control, add 4-8 oz/A of Overdrive in tank mixtures with fluroxypyr.
2,4-D	For noncropland, pasture and rangeland: To complement weed spectrum or increase weed control, add 4-8 oz/A of Overdrive in tank mixtures with 2,4-D.
MSMA ¹	For noncropland only: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with MSMA.
Plateau [®]	For noncropland, pasture and rangeland: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with Plateau.
Arsenal ^{®1} , Sahara ^{®1}	For noncropland only: To complement weed spectrum where total vegetation control is desired, add 4-8 oz/A of Overdrive in tank mixtures with Arsenal or Sahara.
Paramount ^{®1}	For noncropland only: To complement weed spectrum or increase weed control, add 4 oz/A of Overdrive in tank mixtures with Paramount. When tank mixing with Paramount [®] , always include a methylated seed oil (MSO) at the rate of 1.5 pints per acre.
Pendulum [®]	For noncropland only: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with Pendulum.
glyphosate	For noncropland, pasture and rangeland: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with glyphosate.
metsulfuron methyl (Escort [®] , Ally [®])	For noncropland, pasture and rangeland: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with metsulfuron methyl.
sulfometuron methyl ¹ (Oust [®])	For noncropland only: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with sulfometuron methyl.
chlorsulfuron (Telar [®])	For noncropland, pasture and rangeland: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with chlorsulfuron.
diuron ¹	For noncropland only: To complement weed spectrum, add 4-8 oz/A of Overdrive in tank mixtures with diuron.

¹ Tank mixtures with these products are for noncropland sites only. Read and follow the applicable **Restrictions and Limitations, Directions For Use, and Registered Use Sites** for the appropriate tank mix partner.

² Redeem[®] is a combination of triclopyr + clopyralid.

VI. General Restrictions and Limitations

- **Rainfast period:** **Overdrive[®]** herbicide is rainfast **4 hours** after application when used with recommended adjuvants according to section III. **Rates and Additives.**
- **DO NOT** apply through any type of **irrigation** system.
- This product cannot be used to **formulate** or reformulate any other pesticide product.
- Pasture and rangeland grass treated with **Overdrive** can be grazed or harvested for livestock feed immediately after application.
- **Crop Rotation Restriction: DO NOT** plant crops within 120 days after the last application of **Overdrive**, with the following exceptions. If at least 1 inch of rainfall or overhead irrigation is

received following the last application of **Overdrive** (less than or equal to 4 ounces per acre only); alfalfa, cereal grain crops, cotton, grain sorghum and soybeans may be planted following 30 days after the rainfall/irrigation event in all states except California. In the event of crop failure, corn can be replanted 7 or more days after application.

- **Agricultural use sites: Restricted Entry Interval (REI) is 12 hours.**
- **Noncropland use sites: DO NOT** enter treated areas without protective clothing until sprays have dried.

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Threatened and Endangered Species

To ensure the protection of known populations of threatened and endangered plants when applying **Overdrive®** herbicide:

1. Federal agencies must follow NEPA regulations to ensure protection of threatened and endangered plants.
2. State agencies must work with the Fish and Wildlife Service or the Service's designated state conservation agency to ensure protection of threatened and endangered plants.
3. Other organizations or individuals must operate under a Habitat Conservation Plan if threatened or endangered plants are known to be present on the land to be treated.

Overdrive should only be applied when the potential for drift to known populations of threatened or endangered plant species is minimal (e.g. when wind is blowing away from the sensitive area).

Table 3. Site-Specific Rate Limitations for Overdrive

Site	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season
Noncropland sites	8 ounces (0.35 pounds a.i.)	10 ounces (0.438 pounds a.i.)
Conservation Reserve Programs (CRP), Pasture, Hay, and Rangeland	8 ounces (0.35 pounds a.i.)	8 ounces (0.35 pounds a.i.)

VII. Site Specific Information

Rights-of-Way, Utility, Industrial Areas, and Other Noncropland Sites

Overdrive may be used for general broadleaf weed control in roadside, utility, pipeline, railroad rights-of-ways, and other noncropland sites (see **Table 1** for listed weed species). **Overdrive** may be applied alone or with suitable tank mixes to broaden or enhance weed control. See **Table 2** (Tank mix options) for additional information on tank mixes.

Overdrive may be used for general post-emergence broadleaf weed control in noncropland sites where total vegetation control is desired.

Pasture and Rangeland

Overdrive may be used in pasture and rangeland sites for post-emergence broadleaf weed control (see **Table 1** for listed weed species). **Overdrive** may be used alone or in combination with other pasture/rangeland labeled herbicides to enhance the control of perennial weeds or complement the spectrum of weeds controlled. See **Table 2** (Tank mix options) for additional information on tank mixes.

DO NOT apply **Overdrive** to small grains grown for pasture or to newly seeded grasses. Established grasses growing under environmental stresses can exhibit various injury symptoms that may be more pronounced if herbicides are applied. **Overdrive** may injure bentgrass, carpetgrass, buffalograss, St. Augustine, and velvetgrass. **Overdrive** will severely injure alfalfa, clovers, lespedeza, wild winter peas, vetch and other legumes.

Pasture and rangeland grass treated with **Overdrive** can be grazed or harvested for livestock feed immediately after application.

Conservation Reserve Programs

Overdrive may be used in established grass stands in Conservation Reserve Programs (CRP) or federal Set-Aside Programs for post-emergence broadleaf weed control (see **Table 1** for listed weed species). **Overdrive** may be used alone or in combination with other CRP-labeled herbicides to enhance the control of perennial weeds or complement the spectrum of weeds controlled. See **Table 2** (Tank mix options) for additional information on tank mixes.

DO NOT apply **Overdrive** to newly seeded grasses. Established grasses growing under environmental stresses can exhibit various injury symptoms that may be more pronounced if herbicides are applied. **Overdrive** may injure bentgrass, carpetgrass, buffalograss, St. Augustine, and velvetgrass. **Overdrive** will severely injure alfalfa, clovers, lespedeza, wild winter peas, vetch and other legumes.

Conditions of Sale and Warranty

The **Directions For Use** of this product reflects the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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