

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

SEP 19 2005

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Dr. Prasad Rao  
Bayer CropScience  
2 T.W. Alexander Drive  
Research Triangle Park, NC 27709

Subject : Osprey Herbicide  
EPA Registration No. 264-802  
Amended labeling submitted September 13, 2004

Dear Dr. Rao:

The amended labeling referred to above is acceptable provided you do the following:

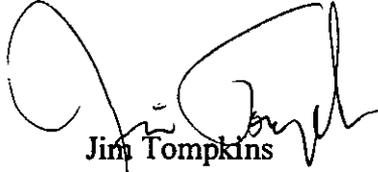
1. In the "Limitations of Liability" section, change "The exclusive remedy..." to "To the extent permitted by law, the exclusive remedy..."
2. Submit one copy of your final labeling before you release your product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release of product for shipment constitutes acceptance of these conditions.

This labeling supercedes all previously accepted labeling for this product (except supplemental labeling). A stamped copy of the label is enclosed for your records.

If you have any questions about this letter, you may call Tobi Colvin-Snyder at 703-305-7801.

Sincerely,



Jim Tompkins

Product Manager (25)

Herbicide Branch

Registration Division (7505C)

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# OSPREY™ Herbicide

**A Herbicide for the Control of Annual Grass and Broadleaf Weeds in Fall- sown or Winter Wheat**

**ACTIVE INGREDIENT:**

Mesosulfuron-Methyl\* (CAS No.: 208465-21-8) ..... 4.5%

**INERT INGREDIENTS:** ..... 95.5%

Protected by U.S. Patent No. 5,648,315 and 5,688,745

**TOTAL: 100.0%**

\*This product is a water dispersible granule containing 4.5% of active ingredient, Mesosulfuron-Methyl, by weight.

**E.P.A. Reg. No. 264-802**

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

For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

**For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.**

**Have the product container or label with you when calling a poison control center or doctor or going for treatment.**

### PRECAUTIONARY STATEMENTS

#### CAUTION

#### HAZARD TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eye or clothing. Wear protective eyewear (safety glasses).

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

**Applicators and other handlers must wear:** Long-sleeved shirt and long pants, socks, shoes, chemical resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils, and protective eyewear (safety glasses). 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.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

SEP 19 2005

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

264-802

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## ENGINEERING CONTROL 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.

### 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 Personal Protective Equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

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 any body of water and do not apply when/where conditions could favor runoff. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

### DIRECTIONS FOR USE

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

**Do not use this product until you have read the entire label.**

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 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 4 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, socks, shoes, chemical resistant gloves such as barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, or neoprene rubber  $\geq$  14 mils, and protective eye wear.

### 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 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.

### GENERAL INFORMATION

OSPREY™ Herbicide is intended for application as a foliar spray in fall-sown or winter wheat for the control of annual grass and broadleaf weeds. This product requires the addition of an adjuvant as specified in this label.

### ENVIRONMENTAL AND BIOLOGICAL ACTIVITY

Best weed control is obtained when OSPREY™ is applied to young actively growing weeds in vigorously growing fall-sown or winter wheat that will shade competitive weeds. OSPREY™ Herbicide is absorbed through the foliage of plants, rapidly inhibiting growth of susceptible weeds. Visual symptoms progress from yellowing to necrosis of the growing point and eventual plant death. Abnormal environmental conditions (excess soil moisture or drought, extreme cold weather) can influence crop tolerance and herbicidal activity and may cause temporary damage to the crop or reduce levels of weed control. This may result in weed stunting, rather than weed death. However, weed competition will be greatly reduced, and should permit normal crop development. Crop response may occur when frost occurs shortly after application to actively growing wheat.

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## APPLICATION TIMING

### Weed Application Timing

OSPREY™ Herbicide is a postemergent herbicide with best results being obtained when applications are made to young actively growing weeds. For annual (Italian) ryegrass and wild oat control, the weed application timing is from 1-leaf to the 2-tiller stage of growth. See weed tables for appropriate application timing and weed size. Treat heavy weed infestations before they become competitive with the crop.

### Wheat Application Timing

Apply OSPREY™ Herbicide to fall-sown or winter wheat from emergence up to the jointing stage of wheat.

## SPRAY ADDITIVES

OSPREY™ Herbicide is a water dispersible granule that does not include an adjuvant. A recommended adjuvant **must** be tank mixed with OSPREY™ Herbicide according to the guidelines as described in the Mixing Order section.

Application of OSPREY™ Herbicide must include a non-ionic surfactant plus ammonium nitrogen fertilizer or a methylated seed oil or a "basic blend" type adjuvant. Use only spray grade quality urea ammonium nitrogen fertilizer (28-0-0 or 30-0-0 or 32-0-0 at 1 – 2 qt/acre) or ammonium sulfate fertilizer (21-0-0-24 at 1.5 – 3 lbs/acre). When ammonium nitrogen fertilizer is used in tank mixture with OSPREY™ Herbicide, transient leaf burn may occur.

Do not use additives that alter the spray solution below 6.0 pH. Best results are obtained at spray solution pH of 6.0 – 8.0.

Organosilicone-based surfactants or crop oil concentrate surfactants are not recommended for use with OSPREY™ Herbicide.

### Non-ionic Surfactant (NIS) + Ammonium Nitrogen Fertilizer (in water carrier solutions)

Use a non-ionic surfactant at a concentration of 0.5% v/v (2 qts per 100 gallons of spray solution) with ammonium nitrogen fertilizer. At least 80% of the surfactant product must be active non-ionic surfactant. Avoid products that do not accurately define their ingredients. Products must contain only EPA-exempt ingredients (40 CFR 1001).

Use a spray grade quality urea ammonium nitrogen fertilizer (28-0-0 or 30-0-0 or 32-0-0 at 1 – 2 qt/acre) or ammonium sulfate fertilizer (21-0-0-24 at 1.5 – 3 lbs/acre).

### Methylated Seed Oil (MSO)

A high quality methylated seed oil may be used in tank mixture with OSPREY™ Herbicide at a rate of 1.3 – 1.5 pt/acre, however, potential for crop response may be increased compared to non-ionic surfactant plus ammonium nitrogen fertilizer.

When a methylated seed oil is used, ammonium nitrogen or ammonium sulfate fertilizer are not recommended.

### Basic Blend Adjuvants

A basic blend adjuvant is a formulated combination of a non-ionic surfactant or methylated seed oil and a nitrogen source. Apply a basic blend adjuvant at 1% v/v or 0.8 – 1.6 pt/acre depending on water carrier volume per acre with OSPREY™ Herbicide. Select the appropriate amount of basic blend adjuvant per acre depending on local conditions.

When a basic blend adjuvant is used, ammonium nitrogen or ammonium sulfate fertilizer is not recommended.

## APPLICATION METHODS

Uniform, thorough spray coverage is important to achieve consistent weed control. The use of nozzles and spray pressure that deliver **MEDIUM** spray droplets as indicated in the nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572 are highly recommended for optimum spray coverage and canopy penetration. Do not use flood-jet nozzles, controlled droplet application equipment, or cone nozzles. Use of certain nozzle types as described in the *Spray Drift Management Factors* section of this label may result in reduced coverage and weed control.

### Ground Application

OSPREY™ Herbicide can be applied broadcast in 10 or more gallons of water per acre. For weed control in dense weed canopies, use 15 or more gallons of water per acre. Weed infestations should be treated before they become competitive with the crop.

The use of 80-degree or 110-degree flat-fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Use a spray pressure of 35 to 40 pounds per square inch (measured at the nozzle). Use screens that are 50 mesh or larger.

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

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### Aerial Application

Calibrate the spray equipment prior to use. OSPREY™ Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. The use of nozzles and spray pressure that deliver MEDIUM spray droplets as indicated in the nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572 are highly recommended for optimum spray coverage and canopy penetration. DO NOT use raindrop nozzles. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

See the **Spray Drift Management** section of this label for additional information on proper application of OSPREY™ Herbicide.

### ENDANGERED SPECIES

To avoid adverse effects on endangered dicot species, the following mitigation measures will be required where endangered species occur in Counties listed in the table below.

For ground applications, the applicator must:

1. Apply when there is sustained wind away from native plant communities, OR
2. Use low-pressure nozzles according to manufacturer's specifications that produce only coarse or very coarse droplets, OR
3. Leave 50 foot untreated buffer between treatment area and native plant communities.

For aerial applications, the applicator must:

1. Apply only when there is sustained wind away from native plant communities, OR
2. Leave 350 foot untreated buffer between treatment area and native plants.

State	County	State	County	State	County
Idaho	Idaho	Oregon	Benton	Washington	Asotin
	Lewis		Clackamas		Chelan
	Nez Perce		Lane		Cowlitz
			Linn		Lewis
Montana	Flathead		Marion		Lincoln
	Lake		Polk		Spokane
			Union		Whitman
			Wallowa		
			Washington	Wyoming	Laramie
			Yamhill		

OSPREY Herbicide is not registered for use in Minnesota.

### MIXING INSTRUCTIONS

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

#### Mixing Order

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of OSPREY™ Herbicide.
3. Continue agitation until the OSPREY™ Herbicide is fully dispersed, at least 5 minutes.
4. Once OSPREY™ Herbicide is fully dispersed, maintain agitation and continue filling tank with water. OSPREY™ Herbicide should be fully mixed with water before adding any other material.
5. As the tank is filling, add the required amount of spray adjuvant (methylated seed oil or basic blend or non-ionic surfactant) and ammonium nitrogen fertilizer. Add additional pesticide tank mix partner, if desired.
6. Continue agitation during herbicide application to ensure uniform spray coverage. If the mixture is not continuously agitated, settling may occur. If settling occurs, thoroughly re-agitate spray solution for at least 10 minutes before application. Use spray solution within 24 hours after mixing.

#### Application in Fluid Fertilizer Carrier Solution

OSPREY™ Herbicide provides consistent performance when applied with water as the spray carrier and a non-ionic surfactant is added to the spray solution. However, OSPREY™ Herbicide may be applied using a liquid nitrogen solution (28-0-0 or 30-0-0 or 32-0-0) as the spray carrier. The fertilizer spray solution should not exceed 15% liquid nitrogen (1.5 gallons of liquid nitrogen in 10 gallons of spray solution per acre). A non-ionic surfactant at a maximum concentration of 0.25% v/v (1 quart per 100 gallons of spray solution) is required in spray solutions containing liquid nitrogen carrier.

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Due to the activity of fertilizer on the crop, temporary injury may result when liquid nitrogen is used as a spray carrier. Crop response symptoms due to the use of liquid nitrogen as a spray carrier may include reduced wheat growth, discoloration, and leaf burn.

**RE-SUSPENDING WG PRODUCTS IN SPRAY SOLUTION**

Like other Water Dispersible Granules or suspension concentrates (SC's), OSPREY™ Herbicide will settle if left standing without agitation. If the spray solution is allowed to settle for one hour or more, re-agitate the spray solution for a minimum of 15 minutes before application.

**COMPATIBILITY**

If OSPREY™ Herbicide is to be tank mixed with other herbicides, 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 solution, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually 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 RECOMMENDATIONS**

**Rate Recommendation Tables for Weed Control**

Apply OSPREY™ Herbicide at a rate of 4.75 ounces per acre in fall-sown or winter wheat. Weed control at selected weed heights and stages is shown in the following tables.

**Annual Weeds Controlled with OSPREY™ Herbicide  
(ounces product/Acre)**

<b>Grass Weed Species Common Name (Scientific Name)</b>	<b>4.75 ozs/Acre OSPREY™ Herbicide</b>
Blackgrass ( <i>Alopecurus myosuroides</i> )	1-leaf to 2-tiller
Bluegrass, annual ( <i>Poa annua</i> )	1-leaf to 2-tiller
Bluegrass, roughstalk ( <i>Poa trivialis</i> )	1-leaf to 2-tiller
Canarygrass, hood * ( <i>Phalaris paradoxa</i> )	1-leaf to 2-tiller
Canarygrass, littleseed * ( <i>Phalaris minor</i> )	1-leaf to 2-tiller
Darnel, Persian* ( <i>Lolium persicum</i> )	1-leaf to 2-tiller
Ryegrass, annual / Italian ( <i>Lolium multiflorum</i> )	1-leaf to 2-tiller
Wild oat * ( <i>Avena fatua</i> )	1-leaf to 2-tiller
Windgrass * ( <i>Apera spica-venti</i> & <i>Apera interrupta</i> )	Up to 3 inches in height
* For fields with infestations of wild oat, windgrass, Persian darnel, or canarygrass only, 3.2 ozs/A of OSPREY™ Herbicide may be used.	

<b>Broadleaf Weed Species</b>	<b>4.75 ozs/Acre OSPREY™ Herbicide</b>
Radish, wild ( <i>Raphanus raphanistrum</i> )	1 – 2 inches
Mustard, wild ( <i>Brassica kaber</i> )	1 – 2 inches
Volunteer Canola ( <i>Brassica napus</i> & <i>Brassica rapa</i> )	1 – 2 inches

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**Annual Weeds Suppressed with OSPREY™ Herbicide  
(ounces product/Acre)**

Broadleaf Weed Species	4.75 ozs/Acre OSPREY™ Herbicide
Chickweed, common ( <i>Stellaria media</i> )	1 - 2 inches
Henbit ( <i>Lamium amplexicaule</i> )	1 - 2 inches
Pigweed, redroot ( <i>Amaranthus retroflexus</i> )	1 - 2 inches
Suppressed weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas but performance will not be commercially acceptable.	

***Bromus* sp. Suppressed with OSPREY™ Herbicide  
(ounces product/Acre)**

Bromus Species Common Name (Scientific Name)	4.75 ozs/Acre OSPREY™ Herbicide
Brome, soft ( <i>Bromus hordeaceus</i> )	1-leaf to 2-tiller
Brome, ripgut ( <i>Bromus rigidus</i> )	1-leaf to 2-tiller
Brome, downy ( <i>Bromus tectorum</i> )	1-leaf to 2-tiller
Brome, Japanese ( <i>Bromus japonicus</i> )	1-leaf to 2-tiller
Cheat ( <i>Bromus secalinus</i> )	1-leaf to 2-tiller
Hairy chess ( <i>Bromus commutatus</i> )	1-leaf to 2-tiller
Suppressed weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas but performance will not be commercially acceptable.	

**TANK MIX RECOMMENDATIONS**

OSPREY™ Herbicide may be tank mixed with the herbicides listed below to provide broad-spectrum weed control. When using OSPREY™ Herbicide in tank mix combinations, follow the precautions and directions of the most restrictive label. It is recommended that herbicides not specifically listed on this label for tank mixing with OSPREY™ Herbicide be applied sequentially, 5 days prior to or 5 days after an OSPREY™ Herbicide treatment. Consult appropriate label of each tank mix partner for recommendations regarding application rates required to control weeds not listed on this label.

**Tank Mixtures for Additional Weed Control**

**Herbicides:**

Ally®	Harmony®
Ally® Extra	MCP ester (0.25 – 0.375 lb ai/acre) **
Buctril® Herbicide *	Peak®
Bronate Advanced™ Herbicide *	Starane™
	Stinger™
Harmony® Extra XP	Finesse®
Express®	Amber®
Olympus™	

Consult appropriate label of each tank mix partner for exact application rates required to control weeds not listed on this label.

\* Equivalent bromoxynil products may be substituted in a tank mix for these products.

\*\* Use rate is based on a 4 lb/gal formulation of MCP Ester. Other formulations of MCP Ester may be tank mixed at a dosage of 0.25 – 0.375 lb ai/acre.

**Tank Mixtures for Disease Control**

OSPREY™ Herbicide may be applied in combination with Stratego®, Tilt® or Topsin® M 70WP fungicides for weed and disease control. Refer to the specific fungicide label for use directions, application rates, restrictions and a list of diseases controlled.

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## Tank Mixtures for Insect Control

OSPREY™ Herbicide may be applied with Sevin® XLR Plus, Warrior® Insecticide with Zeon Technology or Z-Cyte 0.8 EC Insecticide. Refer to the specific insecticide label for use directions, application rates, restrictions and a list of insects controlled.

### Tank Mix Precautions

Always follow the label instructions of the tank mix partner as well as OSPREY™ Herbicide. Check the compatibility of OSPREY™ Herbicide and the tank mix partner by mixing all components in the order specified in the **Mixing Order** section, including adjuvants and water, into a small separate container in order to evaluate compatibility prior to adding them to the tank.

### TANK CLEANUP PROCEDURE

1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
2. Half fill the tank 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). Complete filling of 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.

### SPRAY DRIFT MANAGEMENT

OSPREY™ Herbicide is not volatile. Damage to sensitive crops 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 and grower.

**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 and grower. 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.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
3. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

Where states have more stringent regulations, they shall be observed. The applicator should be familiar with and take into account the information covered in the [Aerial Drift Reduction Advisory Information](#).

### 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 - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

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- **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.

**BOOM LENGTH:**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT:**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

**SWATH ADJUSTMENT:**

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

**WIND:**

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 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.

For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

**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 aerial or ground applications into areas of temperature inversions because drift potential is high. 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.

**ROTATIONAL CROP RESTRICTION**

CROP	ROTATION INTERVAL
Wheat	7 days
Barley	30 days
Sunflower	30 days
Soybean	90 days
Cotton	90 days
Rice	90 days
Lentils	90 days
Dry Beans	90 days
Peas	90 days
Peanuts	90 days
Corn	12 months
All Other Crops	10 Months

OSPREY™ Herbicide is degraded by microbial action. Under adverse condition such as cold temperatures and drought, degradation may be slowed. It is recommended that a field bioassay be run when adverse conditions occur. Grow test strips of the desired rotational crop in the fields previously treated with OSPREY™ Herbicide. Results will indicate if the rotational crop can be grown.

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## RESISTANT WEED MANAGEMENT

Some weed populations may contain plants naturally resistant to OSPREY™ Herbicide or other herbicides with the same mode of action (ALS/AHAS enzyme inhibitors). Repeated use of herbicides with the same mode of action allows resistant weeds to spread. To manage the development and spread of resistant weed populations, use herbicides with different modes of action in tankmixture, rotation, or in conjunction with alternate cultural practices. Consult a Bayer CropScience representative for additional information.

## PRECAUTIONS FOR USE

- Use adjuvants as specified on this label.
- Do not apply OSPREY™ Herbicide to crops undersown with grass and legume species.
- OSPREY™ Herbicide is rainfast 4 hours after application to most weed species. Rainfall within 4 hours may result in reduced weed control.
- Applications should be made to actively growing weeds. Weed control may be reduced when weeds are under stress due to severe weather conditions, drought, very cold temperatures, etc. Weed control may be reduced if the herbicide application is made under dry, dusty conditions – especially in the wheel track areas.
- Do not make more than one application of OSPREY™ Herbicide in one fall-sown or winter wheat growing season.
- Do not apply more than 4.75 ozs/acre of OSPREY™ Herbicide in one fall-sown or winter wheat growing season.
- Do not apply when wind causes drift to off-site vegetation as injury may occur. Small amounts of OSPREY™ Herbicide via drift or tank contamination can cause severe damage to crops other than wheat. Careful management of spray drift and tank cleanout is required.
- Applications of ammonium nitrogen fertilizer independent of those made with herbicides are commonly known as topdress applications. Topdress applications of liquid ammonium nitrogen have been shown on occasion to result in transient leaf burn or stunting when applied within 14 days of an OSPREY™ application.
- Do not apply OSPREY™ Herbicide within 30 days of harvesting wheat forage, and 60 days for hay, grain and straw.
- Do not apply OSPREY™ Herbicide in tank mixture with malathion, mancozeb, Di-Syston or methyl parathion as unacceptable crop phytotoxicity may occur.

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### IMPORTANT: READ BEFORE USE

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

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**Bayer CropScience**

**Bayer CropScience LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709  
1-866-99BAYER (1-866-992-2937)**

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