

7969-113

07-26-2007

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

JUL 26 2007

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Ms. Rebecca Johnston  
BASF Corporation  
26 Davis Dr.  
Research Triangle Park, NC 27709-3528

Subject: Paramount Herbicide  
EPA Registration Number 7969-113  
Submission dated June 25, 2007

Dear Ms. Johnston:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable, provided you make the following changes before you release the product for shipment.

- 1) On page 3, in the section STORAGE AND DISPOSAL, revise the subheading "Container Storage" to "Pesticide Storage". Revise the order of the subsections to 1) Pesticide Storage 2) Pesticide Disposal, and 3) Container Disposal.
- 2) On page 3, revise "Recommendations" to "Instructions" in the first footnote in Table 1, and also in the subheading "Field and Hedge Bindweed Control Recommendations."
- 3) On page 4, revise the statement "Paramount may also be applied using aerial application equipment" to "Paramount may also be applied using aerial application equipment **in certain states.**"
- 4) On page 4, revise the last statement on page 4 to "Use drift reduction nozzles such as Delavan Raindrop Drift Reduction Flat Spray Tip, RF Tips, XR Tee Jet Extended-range Flat Spray Tips, or other brands of comparable capabilities."
- 5) On page 5, revise the statement "Where states have more stringent regulations, they should be observed" to "Where states have more stringent regulations, they **must** be observed."
- 6) On page 7, revise the statement "BASF does not recommend applying AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes" to "Do not apply AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes"
- 7) On page 7, in the section Nonionic Surfactant, revise "recommendation" to "instruction."
- 8) On page 7, in the section Tank Mix Partners/Components, revise "recommended" to "listed."
- 9) On page 7, in the section Compatibility Test for Mix Components, revise "recommended" to "specified."

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Page 2

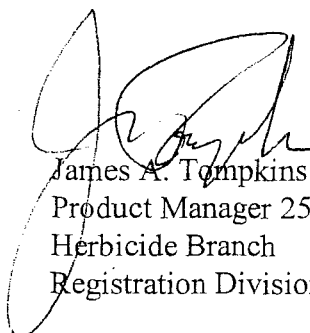
EPA Registration Number 7969-113

- 10) On page 9, revise "Field and Hedge Bindweed Control Recommendations" to "Field and Hedge Bindweed Control Instructions" in both places this phrase occurs.
- 11) On page 10, revise "Field and Hedge Bindweed Control Recommendations" to "Field and Hedge Bindweed Control Instructions"

Submit one (1) copy of final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

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

Sincerely,



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

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The Chemical Company

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

JUL 26 2007

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

7969-113

# Paramount®

herbicide

For weed control in fallow systems, grass grown for seed, preplant wheat (see use directions for geographic limitations), preplant and in-crop sorghum and noncrop areas in the following states: AR, CO, DE, ID, IL, KS, LA, MD, MN, MS, MO, MT, ND, NE, NM, NV, OK, OR, PA, SD, UT, WA, WY, VA, and designated counties in TX.

<b>Active Ingredient:</b>	
quinclorac, 3,7-dichloro-8-quinolinecarboxylic acid .....	75.0%
<b>Other Ingredients:</b> .....	25.0%
<b>Total:</b> .....	100.0%

EPA Reg. No. 7969-113

EPA Est. No. \_\_\_\_\_

## KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

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

**Net Contents:** \_\_\_\_\_

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FIRST AID	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</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 to 20 minutes.</li> <li>• Remove contact lens, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</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 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<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 by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or 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

**Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist. Causes moderate eye injury. May cause allergic skin response.**

#### Personal Protective Equipment (PPE)

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

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as butyl rubber ≥14 mils, or natural rubber ≥14 mils, neoprene rubber ≥14 mils, or nitrile rubber ≥14 mils
- Shoes plus socks

Wash thoroughly with soap and water after handling. 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.

#### 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.

### 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.

#### Environmental Hazards

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**DO NOT** apply directly to water, areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water by cleaning of equipment or disposal of rinsate.

### 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.

All applicable directions, restrictions and precautions are to be followed. This labeling must be in the user's possession during application.

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**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, such as butyl rubber ≥14 mils, or natural rubber ≥14 mils, neoprene rubber ≥14 mils, or nitrile rubber ≥14 mils
- Shoes plus socks

**Storage and Disposal**

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

**Container Storage:** Store in a secure, dry, well-ventilated area.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incinerator or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Pesticide Disposal:** Wastes resulting from use of this product may be disposed of on-site or at an approved waste disposal facility.

**In Case of Spill**

In case of large-scale spillage regarding this product, call:  
 CHEMTREC 1-800-424-9300  
 BASF Corporation 1-800-832-HELP (4357)

**General Information**

**Paramount® herbicide** is intended for use in fallow systems, grass grown for seed, preplant wheat, preplant and in-crop sorghum and noncrop areas. **Paramount** is formulated as a dry flowable designed for dilution with water and spraying in common agricultural spray equipment. When used as directed, **Paramount** will provide suppression or control of weed species listed in **Table 1**.

**Table 1. Target Weeds**

Weeds Controlled	Weeds Suppressed*
<u>Annual Grasses</u>	<u>Annual Broadleaves</u>
Barnyardgrass	Alligatorweed
Crabgrass, large	Kochia
Foxtail, giant	Lambsquarters, common
, green	Ragweed, common
, yellow	, giant
Junglerice	Sunflower, wild
Signalgrass, broadleaf	Thistle <sup>2</sup> , Russian
	Velvetleaf
<u>Annual Broadleaves</u>	<u>Perennial Broadleaves</u>
Bedstraw, catchweed	Dandelion
(cleavers)	Sowthistle <sup>2</sup> , perennial
Clovers	Spurge <sup>2</sup> , leafy
Eclipta	Thistle <sup>3</sup> , Canada
Flax, volunteer	
Jointvetches	
Lettuce, prickly	
Morningglory spp.	
Sesbania, hemp	
<u>Perennial Broadleaves</u>	
Bindweed <sup>1</sup> , field	
, hedge	

\***DO NOT** exceed a total of 16.0 ounces of **Paramount** per acre per calendar year. Apply **Paramount** at yellow bract (pre-bloom) or in the fall prior to the first killing frost. For best performance on this species, tank mix 8.0 ounces per acre of **Paramount** with 4 to 6 ounces per acre of **Distinct® herbicide**.

For improved control, add a tank mix partner that is active on listed species.

<sup>1</sup> Refer to **Field and Hedge Bindweed Control Recommendations** for use directions.

<sup>2</sup> Use 8.0 to 16.0 ounces of **Paramount** per acre in noncrop areas for suppression and annual growth control. **DO NOT** exceed a total of 16.0 ounces of **Paramount** per acre per calendar year. Apply **Paramount** at yellow bract (prebloom) or in the fall prior to the first killing frost. For best performance on this species, tank mix 8.0 ounces per acre of **Paramount** with 4 to 6 ounces per acre of **Distinct**.

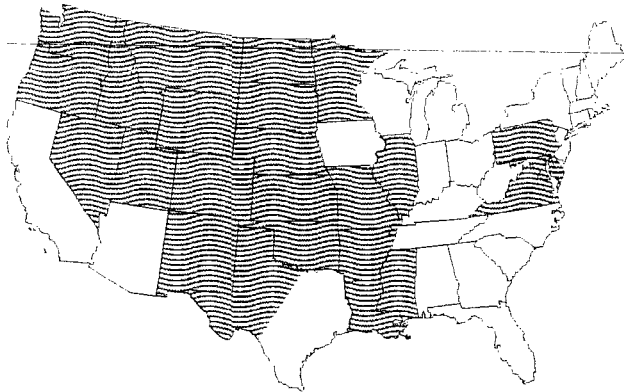
<sup>3</sup> Use 8.0 ounces of **Paramount** per acre for suppression and annual growth control. **DO NOT** exceed a total of 16.0 ounces of **Paramount** per acre per calendar year. Apply **Paramount** at rosette stage or bud stage. Avoid application when seed stalk is bolting. For best performance on this species, tank mix 8.0 ounces per acre of **Paramount** with 4 to 6 ounces per acre of **Distinct**.

**Field and Hedge Bindweed Control Recommendations**

For most effective bindweed control, apply **Paramount** in the fall just prior to the first killing frost. Bindweed plants should be actively growing and at least 4 inches long. If tillage is a part of local postharvest practices, allow a minimum of 30 days for bindweed plants to regrow after tillage prior to application. For best long-term bindweed control, make yearly applications of **Paramount** at 5.3 to 8.0 ounces per acre in the fall. Use the higher rate for dense populations or large plants.

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Figure 1. Application Region for Paramount® herbicide



**Paramount Application Area**

For application regions for **Paramount**, see **Figure 1**.

**Paramount** may be used in the following counties of **Texas**: Archer, Armstrong, Bailey, Baylor, Borden, Briscoe, Brown, Callahan, Carson, Castro, Childress, Clay, Cochran, Coke, Coleman, Collin, Collingsworth, Concho, Cooke, Cottle, Crosby, Dallam, Dawson, Deaf Smith, Denton, Dickens, Donley, Fisher, Floyd, Foard, Garza, Glasscock, Gray, Grayson, Hale, Hall, Hansford, Hardeman, Hartley, Haskell, Hemphill, Hockley, Hutchinson, Jack, Jones, Kent, King, Know, Lamb, Lipscomb, Lubbock, Lynn, McCulloch, Montague, Moore, Motley, Nolan, Chiltree, Oldham, Parmer, Potter, Randall, Roberts, Runnels, Schackelford, Scurry, Sherman, Sterling, Stonewall, Swisher, Taylor, Terry, Throckmorton, Wheeler, Wichita, Wilbarger, Wise, Yoakum, and Young.

**Be sure to obtain and follow all Texas state requirements for Paramount uses.**

**Mode of Action**

**Paramount** is a systemic herbicide with plant uptake occurring through both the foliage and roots. Resultant herbicide symptoms on susceptible plants include twisting, stunting, reddening and chlorosis. For annual plants, symptoms may take up to two weeks after application to develop with death occurring in about three weeks. For perennial weeds, symptoms may not be evident for several weeks after application, and full effect may not be evident for 3 to 6 months.

**Coverage**

When making postemergence applications, weeds must be thoroughly covered with spray because foliar uptake of **Paramount** by the target weed is important for optimum control. Large leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

**Cleaning Spray Equipment**

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

**Application Instructions**

Based on the uses described in this label, **Paramount** should be applied by ground application equipment when possible. **Paramount** may also be applied using aerial application equipment. In all aerial applications read and adhere to all drift management guidelines in this labeling. Due to the possible presence of endangered plant species **DO NOT** apply **Paramount** by air in the states or counties listed in **Table 2**.

**Paramount** may be applied as either a broadcast or spot spray application. Applications must be made to actively growing weeds.

For most broadleaf weeds, the most effective control will result from applying **Paramount** early when weeds are small. Delaying application permits weeds to exceed the maximum size and may prevent adequate control.

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

**Ground Application (Broadcast)**

**Water Volume:** Use 5 to 30 gallons of water per broadcast acre. When weed foliage is dense, higher spray volumes may be required.

**Spray Pressure:** Use a maximum of 30 psi (measured at the boom, not at the pump or in the line).

**Application Equipment:** Use only nozzles that will produce uniform spray patterns and thorough coverage, spaced up to 20 inches apart. Select nozzles designed to produce minimal amounts of fine spray particles. **DO NOT** use controlled droplet applicator (CDA) nozzles as erratic coverage can cause inconsistent weed control. **DO NOT** use selective application equipment such as recirculating sprayers or wiper applicators. Drift reduction nozzles such as **Delavan®** Raindrop Drift Reduction Flat Spray Tip, RF Tips, **XR Tee Jet™** Extended-range Flat Spray Tips, or other brands of comparable capabilities are recommended.

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**Table 2. Paramount® herbicide Aerial Use Restrictions**

State	Counties
Arkansas	<b>DO NOT APPLY Paramount BY AIR</b> - all counties
Colorado	Boulder, Delta, Garfield, Jefferson, La Plata, Mesa, Montezuma, Montrose, Morgan, Rio Blanco, San Miguel, Weld
Idaho	Idaho, Kootenai, Latah
Kansas	Allen, Anderson, Atchison, Bourbon, Coffey, Crawford, Douglas, Franklin, Jackson, Jefferson, Johnson, Leavenworth, Linn, Lyon, Miami, Neosho, Osage, Pottawatomie, Riley, Shawnee
Louisiana	<b>DO NOT APPLY Paramount BY AIR</b> - all counties
Mississippi	<b>DO NOT APPLY Paramount BY AIR</b> - all counties
Montana	Lake, Missoula
Nebraska	Box Butte, Cherry, Garden, Hall, Lancaster, Morrill, Seward, Sheridan
New Mexico	Chaves, Dona Ana, Eddy, San Miguel
North Dakota	Ransom, Richard
Oklahoma	Choctaw, Craig, Rogers
Oregon	Benton, Clackamas, Coos, Douglas, Harney, Klamath, Lane, Linn, Marion, Polk, Wallowa, Washington, Yamhill
South Dakota	Bennett, Brookings, Brown, Clay, Coddington, Day, Deuel, Grant, Lincoln, Minnehaha, Moody, Roberts, Todd, Turner, Union, Yankton
Texas	Bandera, Brazos, Burleson, Coke, El Paso, Fort Bend, Freestone, Harris, Hays, Hudspeth, Jim Wells, Kerr, Kimble, Kleberg, Leon, Live Oak, Madison, Mitchell, Nueces, Pecos, Refugio, Robertson, Runnels, San Patricio, Starr, Uvalde, Washington
Utah	Cache, Carbon, Duchesne, Emery, Garfield, Kane, Salt Lake, San Juan, Sanpete, Sevier, Tooele, Uintah, Utah, Washington, Wayne, Weber
Washington	Chelan, Clark, Cowlitz, Island, Spokane

**Aerial Application**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements **DO NOT** apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed ¾ 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.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the [Aerial Drift Reduction Advisory Information](#) presented below.

**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**).

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### 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.

### 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.

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

### WIND

Drift potential is lowest between wind speeds of 2 to 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.

### 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

Applications should not occur during a temperature inversion 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.

### 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 habitat for threatened or endangered species, or nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### Spray Additives

To achieve consistent weed control, the use of spray additive(s) with **Paramount** is required. The recommended spray additive with **Paramount** is methylated seed oil. The use of crop oil concentrate with **Paramount** is also permitted. A nitrogen fertilizer source (AMS or UAN) can be added to enhance efficacy, but cannot be used in place of methylated seed oil or crop oil concentrate. Refer to **Table 3. Spray Additive Rate Per Acre** for spray additive rates.

Table 3. Spray Additive Rate per Acre

Spray Additive	Ground Application
Methylated Seed Oil	1.0 to 2.0 pints <sup>2</sup>
Crop Oil Concentrate	2.0 pints
AMS <sup>1</sup>	2.5 pounds
UAN Solution <sup>1</sup>	0.5 to 1 gallon
<sup>1</sup> Optional	
<sup>2</sup> For best grass control, use at least 1.5 pints/acre of methylated seed oil.	

When an adjuvant (or a specific adjuvant product, such as a drift control agent) is to be used with this product, the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant is recommended.



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### Methylated Seed Oil or Crop Oil Concentrate:

A methylated seed oil or crop oil concentrate must contain either a petroleum or vegetable oil base and **MUST meet all of the following criteria:**

- Non-phytotoxic
- Contain only EPA-exempt ingredients
- Provide good mixing quality in the jar test
- Successful in local experience

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see **Compatibility Test for Mix Components.**

**For bindweed control in Oklahoma, New Mexico and the designated counties of Texas, the use of methylated seed oil plus AMS is mandatory with Paramount® herbicide when it is applied alone.**

### Nitrogen Fertilizer Source:

- **Urea ammonium nitrate (UAN):** Commonly referred to as 28%, 30%, or 32% nitrogen solution. **DO NOT** use brass or aluminum nozzles when spraying UAN.
- **Ammonium sulfate (AMS):** AMS may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned. BASF does not recommend applying AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience. Because most nitrogen solutions are mildly corrosive to galvanized, mild steel, and brass spray equipment, rinse the entire spray system with water soon after use. Use high-quality AMS to avoid plugging spray nozzles. The AMS must be readily soluble in water and contain no insoluble materials. Local sources of high-quality, fine feed-grade AMS may be better than fertilizer grade. Low-quality AMS may contain material that will not readily dissolve, which could result in nozzle tip plugging. To determine AMS quality, perform a jar test adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for 1 minute. If any undissolved sediment is observed, pre-dissolve the AMS in water and filter before adding it to the spray tank. If the AMS is added directly to the spray tank, add slowly while agitating. Adding the mix too quickly may clog outlet lines.

### Nonionic Surfactant:

Alternatively, an 80% active nonionic spray surfactant may only be used when **Paramount** is tank mixed with other products that restrict the use of oil additives. However, the use of nonionic surfactant may result in reduced weed control with **Paramount**. The standard label recommendation for nonionic surfactant is 1 quart per 100 gallons of water (0.25% vol/vol). Applications with nonionic surfactant require the addition of a nitrogen fertilizer source.

## General Tank Mixing Information

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.

### Tank Mix Partners/Components

Use the following tank mixes to achieve control of the weeds listed as suppressed in **Table 1**. The following herbicides may be tank mixed with **Paramount** according to the specific tank mixing instructions in this label and respective product labels. For all recommended tank mixes, use a rate of 5.3 to 8.0 ounces per acre of **Paramount**.

BASF does not recommend using tank mixes other than those listed on BASF labeling. Physical incompatibility, reduced weed control, or crop injury may result from mixing **Paramount** with other pesticides, additives, or fertilizers. Local agricultural authorities may be a source of information when using other than BASF-recommended tank mixes.

- 2,4-D
- atrazine
- **Buctril®** (bromoxynil)
- **Buctril® + atrazine** (bromoxynil + atrazine)
- **Clarity®** (dicamba)
- **Cyclone®** (paraquat)
- **Distinct®** (diflufenzopyr + dicamba)
- **Fallowmaster®** (glyphosate + dicamba)
- **Frontier®** (dimethenamid)
- **Guardman Max®** (dimethenamid-P + atrazine)
- **Landmaster®** (glyphosate + 2,4-D)
- **Marksman®** (dicamba + atrazine)
- **Outlook®** (dimethenamid-P)
- **Peak®** (prosulfuron)
- **Roundup® RT** (glyphosate)
- **Roundup® Ultra** (glyphosate)
- **Weedmaster®** (dicamba + 2,4-D)

### Compatibility Test for Mix Components

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

- 1) **Water:** For 20 gallons per acre spray volume, use 3-1/3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) **Products in PVA bags:** Cut an opening in the water-soluble PVA bag just large enough to use a teaspoon for measuring purposes. Use the opened water-soluble PVA bag first when preparing spray solution. Cap the jar and invert 10 cycles.
- 3) **Water-dispersible products** including **Paramount**, such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions: For the 5.3-ounce rate, use 1 teaspoon. For the 8.0-ounce rate, use 1.5 teaspoons. Cap the jar and invert 10 cycles.

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- 4) **Water-soluble products:** Cap the jar and invert 10 cycles.
- 5) **Emulsifiable concentrates:** (methylated seed oil or crop oil concentrate when applicable). Cap the jar and invert 10 cycles.
- 6) **Water-soluble additives** (AMS or UAN when applicable): Cap the jar and invert 10 cycles.
- 7) Let the solution stand for 15 minutes.
- 8) **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. **DO NOT** use any spray solution that could clog spray nozzles.

### Mixing Order

- 1) **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2) **Agitation.** Maintain constant agitation throughout mixing and application.
- 3) **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.
- 4) **Products in PVA bags:** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 5) **Water-dispersible products** including **Paramount® herbicide**, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions.
- 6) **Water-soluble products.**
- 7) **Emulsifiable concentrates** (such as oil concentrate when applicable).
- 8) **Water-soluble additives** (such as AMS or UAN when applicable).
- 9) **Remaining quantity of water.**  
Maintain constant agitation during application.

### Restrictions and Limitations

- **Maximum seasonal use rate:** **DO NOT** apply more than a **total of 16 ounces** of **Paramount** per acre, per calendar year.
- **Restricted-Entry Interval (REI): 12 hours.**
- **Crop Rotation Restrictions:** In case of crop failure, only spring or winter wheat or grain sorghum may be immediately replanted. **DO NOT** plant any other crop other than spring or winter wheat or grain sorghum for 309 days (10 months) following application. For alfalfa, clover, dry beans, flax, peas, lentils, safflower, *Solanaceous* crops listed below, and sugar beets, **DO NOT** replant for 24 months and conduct a bioassay prior to planting any of these crops.
- **DO NOT** apply to weeds or grasses under stress due to lack of moisture, herbicide injury, mechanical injury or cold temperatures, as unsatisfactory control may result.
- **DO NOT** apply to crops subjected to stress conditions such as hail damage, flooding, drought, injury from other herbicides, or widely fluctuating temperatures, as crop injury may result.

- **DO NOT** use selective application equipment such as recirculating sprayers, wiper applicators, or shielded applicators.
- **Rainfast period: Paramount** is rainfast 6 hours after application.
- **Wind Speed for Ground Applications: DO NOT** apply **Paramount** when wind is blowing more than 10 mph.
- **DO NOT** apply **Paramount** using aerial equipment in specific states or counties listed in **Table 2**.
- **DO NOT** apply through any type of irrigation equipment.

### Drift:

- **DO NOT** allow **Paramount** to drift onto other desirable plants, especially sensitive crops belonging to the following plant families:
  1. *Solanaceae* (tomato, potato, tobacco, eggplant, peppers (*Capsicum*), among others)
  2. *Umbelliferae* (celery, parsley, carrots, among others)
  3. *Leguminosae* (alfalfa, green bean, among others)
  4. *Convolvulaceae* (sweet potato, among others)
  5. *Chenopodiaceae* (spinach, sugar beet, among others)
  6. *Malvaceae* (okra, among others)
  7. *Cucurbitaceae* (watermelon, cantaloupe, squash, pumpkin, among others)
  8. *Compositae* (lettuce, sunflowers, among others)
  9. *Linaceae* (flax)
- **DO NOT** allow spray containing **Paramount** to drift onto areas where tomatoes are to be planted, have been planted, or onto emerged tomatoes, as severe injury will occur.
- **DO NOT** use **Paramount** in tank mixes not specified on this label.
- **DO NOT** premix **Paramount** with fungicides, herbicides, insecticides, additives, or fertilizers as contamination of mixing equipment and movement of **Paramount** to off-site mixing areas can occur.

### Crop-Specific Information

#### Grass Grown For Seed

For use in the following grasses grown for seed:

#### Cool Season Grasses:

**Bromegrass**, smooth  
 , meadow  
 , smooth x meadow cross

#### European dunegrass

**Fescue**, fine  
 , tall

#### Junegrass

#### Kentucky bluegrass

#### Quackgrass

#### Needlegrass, green

#### Orchardgrass

**Ryegrass**, annual  
 , Indian  
 , perennial

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**Cool Season Grasses (continued):**

- Wheatgrass**, bluebunch
  - , crested
  - , fairway
  - , fairway x crested cross
  - , intermediate
  - , pubescent
  - , Siberian
  - , slender
  - , tall
  - , thickspike
  - , western
  - , bluebunch x quack cross

**Wildrye**, altai

- , basin
- , beardless
- , Dahurian
- , mammoth
- , Russian

**Warm Season Grasses:**

**Bermudagrass**

- Bluestem**, big
  - , little
  - , sand

**Gramma**, blue

- , side-oats

**Sandreed**, prairie

**Switchgrass**

Apply **Paramount® herbicide** at 5.3 ounces per acre for control of annual grasses and broadleaf weeds (see **Table 1**). Apply **Paramount** for bindweed control after grass seed harvest and hay removal but before the first killing frost. Refer to **Field and Hedge Bindweed Control Recommendations** for use directions.

**Tank Mixing Information:**

Other registered products may be tank mixed with **Paramount**. 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.

**Fallow Systems or Preplant Wheat or Preplant Sorghum**

**DO NOT use preplant wheat in the following states: ID, MT, NV, OR, UT, WA or WY.**

**Paramount** can be applied in fallow areas or preplant wheat (**DO NOT** apply in ID, MT, NV, OR, UT, WA or WY) or preplant grain sorghum at 5.3 ounces per acre for control of annual grasses and broadleaf weeds (see **Table 1**). For bindweed control with **Paramount**, refer to **Field and Hedge Bindweed Control Recommendations** for use directions.

When **Paramount** is applied as a preplant treatment in wheat, plant wheat at least 1" deep. Shallow planting (<1" deep) may result in possible crop injury when wheat is subjected to drought or other stress conditions.

**Fallow Tank Mixes:**

Other registered products may be tank mixed with **Paramount**. 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.

- 2,4-D
- **Clarity®** (dicamba)
- **Distinct®** (diflufenzopyr + dicamba)
- **Fallowmaster®** (glyphosate + dicamba)
- **Landmaster®** (glyphosate + 2,4-D)
- **Roundup® RT** (glyphosate)
- **Roundup® Ultra** (glyphosate)

**In-Crop Sorghum**

Apply **Paramount** to grain sorghum at 5.3 to 8.0 ounces per acre from preemergence to postemergence (to 12-inch tall sorghum) for control of annual grasses and broadleaf weeds. For best annual grass control, **Paramount** should be applied at 5.3 to 8.0 ounces per acre in a tank mix with atrazine at 0.5 to 1.0 pound ai per acre when weeds are less than 2 inches tall. **DO NOT** use liquid fertilizer as a carrier for postemergence applications of **Paramount** to grain sorghum.

In Oklahoma, New Mexico, and in the designated counties in Texas, APPLY ONLY 8.0 ounces of **Paramount** per acre to in-crop sorghum.

**Table 4. Tank Mix Use Rate per Acre with Paramount**

Herbicide Tank Mix Partner	Fallow and Preplant Wheat	Preplant Sorghum	Postemergence Sorghum
2,4-D	0.375 - 1.0 lb ai	0.375 - 1.0 lb ai	0.125 - 0.5 lb ai
atrazine	—	0.5 - 1.0 lb ai	0.5 - 1.0 lb ai
<b>Clarity</b>	4 - 16 oz	4 - 16 oz	8 oz
<b>Fallowmaster</b>	22 - 44 oz	22 - 44 oz	—
<b>Landmaster</b>	32 - 54 oz	32 - 54 oz	—
<b>Peak®</b>	—	—	0.25 oz
<b>Roundup RT and Roundup Ultra</b>	12 - 32 oz	12 - 32 oz	—
<b>Buctril®</b>	—	—	16 oz
<b>Buctril® + atrazine</b>	—	—	32 oz
<b>Guardman Max®</b>	—	—	40 - 64 oz

**Noncrop Areas (Roadsides, Fencelines and Rights-of-Way)**

**Paramount** may be applied to noncrop areas such as fence lines, roadsides, highway medians, utilities, railroad and pipeline rights-of-way. **Paramount** may be applied to noncropland areas for the control of certain weeds in the Noxious Weed Control Programs, Districts or Areas includ-



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### Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the 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. To the extent consistent with applicable law, 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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