

241-379

11/19/2004

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

NOV 19 2004

Mr. Joseph O'Grodnick  
BASF Corporation  
26 Davis Drive  
P.O. Box 13528  
Research Triangle Park, NC 27709-3528

Subject: Raptor/Beyond Herbicide  
EPA Registration No. 241-379  
Revised labeling for Raptor Master label submitted November 18, 2004;  
2003, Raptor Subset Label submitted November 18, 2004; and Beyond  
Subset Label submitted November 1, 2004; and Supplemental labeling for  
snap beans, lima beans (succulent), english peas, and clover grown for  
seed submitted November 1, 2004

Dear Mr. O'Grodnick:

The amended labeling referred to above is acceptable provided that you make the following changes to your labeling:

1. Add the following statements to the directions for use section of the supplemental labeling for snap beans, lima beans (succulent), english peas, and clover grown for seed:

Read the label affixed to the container for Raptor Herbicide before applying. Use of Raptor Herbicide according to this supplemental labeling is subject to the use precautions and limitations imposed by the label affixed to the container for Raptor Herbicide.

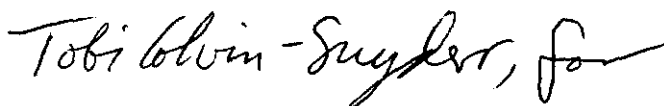
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2. At the top of the first page of the clover supplemental label, after "Tankmix with...red clover" add "grown for seed".
3. At the top of the first page of the snap bean supplemental label, change the expiration date from "May 6, 2005" to "May 6, 2006".

This labeling supercedes all previously accepted labeling for this product (except supplemental labeling). The supplemental labeling for snap beans, lima beans (succulent), english peas, and clover grown for seed expires on May 6, 2006. Stamped copies of the labels are 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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The Chemical Company

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

NOV 19 2004

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

241-379

# Raptor

herbicide

**FOR USE ON ALFALFA, BEANS (DRY), CHICORY, CLEARFIELD\* CANOLA,  
CLEARFIELD\* SUNFLOWER, CLEARFIELD\* WHEAT, CLOVER GROWN FOR SEED,  
LIMA BEANS (SUCCULENT), PEAS (DRY), PEAS (ENGLISH), SNAP BEANS AND  
SOYBEANS**

**Apply Only on CLEARFIELD\* Canola, Sunflower and Wheat Varieties**

**Active Ingredient:**

Ammonium salt of imazamox 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H  
imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid\* ..... 12.1%

**Inert Ingredients:** ..... 87.9%

**Total:** ..... 100.0%

\* Equivalent to 11.4% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-  
5-(methoxymethyl)-3-pyridinecarboxylic acid  
(1 gallon contains 1.0 pound of active ingredient as the free acid)

U.S. Patent No. 5,334,576  
EPA Reg. No. 241-379

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.)

**In case of an emergency endangering life or property involving this product,  
call (800) 832-HELP (4357).**

**See Next Page for Additional Precautionary Statements**

See inside booklet for complete **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

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<b>FIRST AID</b>	
<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>
<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 first 5 minutes, then continue rinsing eye.</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 mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

### **PRECAUTIONARY STATEMENTS**

#### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

#### **CAUTION!**

Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

#### **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-resistant 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, or neoprene rubber ≥14 mils, or nitrile rubber ≥14 mils.
- Shoes plus socks.

Follow 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.

### **ENVIRONMENTAL HAZARDS**

This pesticide may be hazardous to plants outside the treated area. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Offsite movement from spray drift, volatilization, and runoff may be hazardous to neighboring crops and vegetative habitat utilized for food and cover by wildlife and aquatic organisms. **DO NOT** contaminate water when disposing of equipment washwaters.

#### **IN CASE OF EMERGENCY:**

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

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

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of pesticide application.

**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.

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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 **4 hours**. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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  $\geq 14$  mils, or natural rubber  $\geq 14$  mils, or neoprene rubber  $\geq 14$  mils, or nitrile rubber  $\geq 14$  mils.
- shoes plus socks.

Ensure spray drift to non-target species does not occur.

**DO NOT** apply **Raptor® herbicide** in any manner not specifically described in this label.

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

When applied by either ground or air, **Raptor** spray drift or other indirect contact may injure sensitive crops, including non-imidazolinone tolerant wheat, sunflower or canola, sugarbeets, and leafy vegetables.

Spray equipment used for **Raptor** application must be drained and thoroughly cleaned with water before being used to apply other products.

Observe all cautions and limitations on this label and on the labels of products used in combination with **Raptor**. **DO NOT** use **Raptor** other than in accordance with the instructions set forth on this label. Keep containers closed to avoid spills and contamination.

### STORAGE AND DISPOSAL

#### PROHIBITIONS:

- KEEP FROM FREEZING.
- **DO NOT** store below 32° F.
- **DO NOT** contaminate water, food or feed by storage or disposal.

**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:** 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.

### I. GENERAL INFORMATION

The mode of weed killing activity involves uptake of **Raptor** by foliage and/or weed roots and rapid translocation to the growing points. After **Raptor** application, susceptible weeds may show yellowing and weed growth will stop. Susceptible weeds stop growing and either die or are not competitive with the crop. Adequate soil moisture is important for optimum **Raptor** activity. When adequate soil moisture is present, **Raptor** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil. A timely cultivation after a **Raptor** application may improve general weed control.

When organophosphate (such as Lorsban® insecticide) or carbamate insecticides (such as Furadan™ insecticide) are tank-mixed with **Raptor**, temporary injury may result to the treated crop. Separate organophosphate and **Raptor** application by at least 7 days to reduce potential for injury.

**DO NOT** tank-mix organophosphate or carbamate insecticides with **Raptor** on **CLEARFIELD®** crops unless otherwise specified in writing by BASF.

Use of **Raptor** is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following **Raptor** applications. These effects can be more pronounced if crops are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within 1-2 weeks.

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**Replanting:** If replanting is necessary in a field previously treated with **Raptor® herbicide**, the field may be replanted to beans (dry), **CLEARFIELD®** Canola, **CLEARFIELD®** Corn, **CLEARFIELD®** Sunflowers, **CLEARFIELD®** Wheat, peas (English), peas (dry), lima beans (succulent) or soybeans. Rework the soil no deeper than 2 inches. **DO NOT** apply a second treatment of **Raptor**. **DO NOT** apply **Pursuit® herbicide**, **Raptor**, or **Pursuit Plus EC herbicide** if soybeans are re-planted.

Naturally occurring biotypes<sup>1</sup> of some of the weeds listed on this label may not be effectively controlled by this and/or other products with either the ALS/AHAS enzyme inhibiting mode of action. Other herbicides with the ALS/AHAS enzyme inhibiting mode of action include the sulfonlureas (e.g., Amber®, Express®, Everest®, Finesse®, Glean®, Peak®, Rave™, Accent®, Ally®, Basis®, Classic®, Exceed®, Harmony® Extra, Maverick®, Permit®, Pinnacle®, Silverado® herbicides, etc.), imidazolinones (e.g., Pursuit, Scepter®, Cadre® and Lightning® herbicides), the sulfonamides (e.g., Hornet® herbicide, etc.) and the pyrimidyl benzoates (e.g., Staple® herbicide, etc.). If naturally occurring ALS/AHAS resistant biotypes are present in a field, **Raptor** and/or any other ALS/AHAS enzyme inhibiting mode of action herbicide should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

<sup>1</sup> A weed biotype is a naturally occurring plant within a given species that has a slightly different, but distinct, genetic makeup from other plants.

**Raptor** is very active against many broadleaf and grass weed species. For long term weed management, use two herbicides with different modes of action to reduce the potential for weed resistance. Crop (and herbicide) rotation is also effective in managing weed resistance where herbicides of different modes of action are used. Tillage, where practical (such as in fallow production, or prior to planting) is also effective in controlling weeds to minimize resistance development. Additionally, a burndown herbicide during fallow or prior to planting is also effective in reducing weed resistance development.

**Raptor** has no preharvest interval (PHI) for any crop.

## II. MIXING INSTRUCTIONS

POSTEMERGENCE APPLICATIONS OF **RAPTOR** REQUIRE THE ADDITION OF AN ADJUVANT **AND** A NITROGEN FERTILIZER SOLUTION.

### I. ADJUVANTS

**CROP OIL CONCENTRATE:** A petroleum or vegetable seed based crop oil concentrate may be

used. A methylated seed oil is recommended when weeds are under moisture or temperature stress. Use methylated seed oils or crop oil concentrate at a rate of 1-2 gallons per 100 gallons of spray solution.

**OR**

**SURFACTANTS:** Use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 1 quart per 100 gallons of spray solution (0.25% vol/vol). An organo-silicone surfactant may be used in place of a non-ionic surfactant.

**AND**

### II. NITROGEN FERTILIZER

Recommended nitrogen based fertilizers include liquid fertilizers (such as liquid ammonium sulfate, 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

When weeds are under moisture or temperature stress, using higher nitrogen fertilizer rates (UAN at 5% v/v or 20 lbs AMS/100 gallons) may improve weed control. Additional crop response may be observed when higher fertilizer rates are used.

### DO NOT USE CROP OIL CONCENTRATE OR METHYLATED SEED OIL WITH RAPTOR IN CHICORY OR CLEARFIELD® WHEAT.

Fill the spray tank one-half to three-quarters full with clean water. Use a calibrated measuring device to measure the required amount of **Raptor**. Add **Raptor** to the spray tank while agitating. Add adjuvants and fill the remainder of the tank with water.

**NOTE:** Nitrogen fertilizer is not required when applied in use areas south of Interstate Highway 40, except in the states of Texas, New Mexico, Oklahoma, Arizona, and California.

**NOTE:** Do not apply **Raptor** in liquid fertilizer as the carrier (except to **Clearfield®** winter wheat).

### LIQUID FERTILIZER AS A CARRIER (Clearfield® winter wheat only)

**DO NOT** apply **Raptor** in liquid fertilizer concentrate except **Raptor** may be applied to **CLEARFIELD®** winter wheat in a water/liquid fertilizer solution with at least 50% water. Add a non-ionic surfactant at the rate of 1 quart per 100 gallons of spray solution (0.25%). Some crop leaf burn from the fertilizer in the solution may occur from the fertilizer application.

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**NOTE: Additional MIXING INSTRUCTIONS for DRY BEANS AND DRY PEAS (Excluding English Peas, Lima Beans (succulent) and Snap Beans).**

**Raptor® herbicide** applications may be made to dry beans and dry peas either with, or without the addition of a fertilizer. The addition of nitrogen-based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of dry beans and dry peas response. When nitrogen is added to the mixture, add **Basagran® herbicide** as a tank mixture partner at a rate of 6 to 16 oz/A to minimize crop response. For applications to dry peas, always add **Basagran** to the spray mixture. For enhanced grass activity, add a crop oil or methylated seed oil instead of surfactant. Always add **Basagran** at the rates indicated above when crop oils and/or fertilizer are used in the spray mixture. **Basagran** applications at rates higher than 16 oz/A may reduce grass control.

**NOTE: See DIRECTIONS FOR USE for ENGLISH PEAS, LIMA BEANS (Succulent) and SNAP BEANS in Section IV. APPLICATION INSTRUCTIONS, for additional mixing instructions.**

**TANK MIX COMBINATIONS WITH OTHER HERBICIDES**

If other herbicides or other spray tank components are tank-mixed with **Raptor**, while agitating, add components in the following order and thoroughly mix after adding each component:

- 1) Fill spray tank 1/2 to 3/4 full with clean water.
- 2) Add soluble packet products and thoroughly mix.
- 3) Add WP (wetttable powder), DG (dispersible granule), DF (dry flowable) or liquid flowable formulations not in soluble packets.
- 4) Add **Raptor** and thoroughly mix.
- 5) Add other aqueous solution products.
- 6) Add EC (emulsifiable concentrate) products.
- 7) Add surfactant or crop oil to the spray tank.
- 8) Add nitrogen fertilizer solution.
- 9) While agitating, fill the remainder of the tank with water.

To avoid injury to sensitive crops, spray equipment used for **Raptor** applications must be drained and thoroughly cleaned with water before being used to apply other products.

When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be

exceeded. **Raptor** cannot be mixed with any product containing a label prohibiting such mixtures.

**III. SPRAYING INSTRUCTIONS**

**DO NOT** apply when wind conditions may result in drift, when temperature inversion conditions exist, or when spray may be carried to sensitive crops. Sensitive crops include but are not limited to leafy vegetables and sugarbeet.

**GROUND APPLICATION**

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. A spray pressure of 20 to 40 psi is recommended.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying **Raptor** to minimum or no-till crops. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Adjust the boom height to ensure proper coverage of weed foliage (according to the manufacturer's recommendation). Use flat-fan nozzle tips or similar appropriate nozzle tips to ensure adequate coverage.

Avoid overlaps when spraying.

**GROUND APPLICATION WITH A LOW-VOLUME SPRAYER**

**Raptor** may be applied with a low-volume (Spracoupe®-type) sprayer. When applying **Raptor** with a low-volume sprayer, spray the weeds before they reach the maximum size listed in this label. Adequate control of weeds is dependent upon good spray coverage of the weeds. The sprayer must be calibrated to deliver the recommended spray volume and pressure to ensure adequate spray coverage of the weeds.

When applying **Raptor** with a low-volume sprayer, apply a minimum of 10 gallons per acre of spray solution with a nozzle pressure between 40-60 psi for optimum coverage.

**AERIAL APPLICATION**

**Raptor** may be applied by air to all crops listed on this label.

Uniformly apply with properly calibrated equipment in 5 or more gallons of water per acre. The addition of an adjuvant AND fertilizer solution are required for optimum weed control.

Non-uniform applications of **Raptor** through aerial equipment may increase **CLEARFIELD®** crop response, especially when applied to large slopes and hills. All risks associated with non-uniform applications shall be assumed by the user.

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.

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 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.

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**).

#### 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 pro-

duce 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 2-10 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



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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 non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Applicator is responsible for any loss or damage which results from spraying **Raptor® herbicide** in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

## IV. APPLICATION INFORMATION

**Apply Raptor as a postemergence treatment when weeds are actively growing and before they exceed the maximum recommended size (see weed control tables following each crop).** Delay application until the majority of the weeds are at the recommended growth stage. In general, **Raptor** should be applied when weeds are small and actively growing, however, delay application in seedling alfalfa and dry beans until minimum growth stages have occurred (refer to seedling alfalfa and dry bean sections).

An adjuvant (either a surfactant or a crop oil concentrate) and a nitrogen fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANT** section under **MIXING INSTRUCTIONS** for specific instructions.

When **Raptor** is applied postemergence, absorption will occur through both the roots and foliage. Susceptible weeds stop growing and either die or are not competitive with the crop. **Raptor** not only controls many existing broadleaf and grass weeds when applied postemergence, it also provides activity on susceptible weeds that may emerge shortly after application.

Weeds are most easily controlled when actively growing. Under conditions of cold temperatures (less than 40° F, maximum daytime temperatures), weed control may be less than optimal.

For maximum weed control, cultivate (where possible) 7 - 10 days following a postemergence **Raptor** application. This timely cultivation will enhance

residual weed activity, especially under dry conditions.

**Raptor** should be applied a minimum of one hour before rainfall or overhead irrigation.

## ALFALFA

### DIRECTIONS FOR USE

**Apply Raptor as an early postemergence treatment when weeds are actively growing and before they exceed a height of 3 inches, unless otherwise indicated.** Delay application until the majority of the weeds are at the recommended growth stage. Apply **Raptor** to crop and weeds that are actively growing.

### USE RATE

Apply **Raptor** postemergence only at a broadcast rate of 0.031 - 0.047 lb imazamox a.e. per acre (4 to 6 ounces **Raptor** per acre) to seedling or established alfalfa grown for forage, hay or seed. At the recommended application rate, 1 gallon of **Raptor** will treat 21-32 acres.

### SEEDLING ALFALFA

Apply **Raptor** when the seedling alfalfa is in the second (2nd) trifoliolate stage or larger and when the majority of the weeds are 1-3 inches tall. When applied to alfalfa grown for seed, apply **Raptor** before bud formation. For prostrate growing weeds (such as mustards and filaree) apply **Raptor** before the rosette exceeds 3 inches. When **Raptor** is applied to seedling alfalfa, there may be a temporary reduction in growth. Alfalfa soon outgrows any effects of the herbicide.

### ESTABLISHED ALFALFA

**Raptor** can be applied to established alfalfa in the fall, winter, or in the spring to dormant, or semi-dormant alfalfa, or between cuttings. Any application should be made before significant alfalfa growth or re-growth (3 inches) to allow **Raptor** to reach the target weeds.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

A maximum of 0.047 lb imazamox a.e./acre (6 ounces per acre of **Raptor**) per season may be applied to alfalfa.

**DO NOT** make sequential applications of **Pursuit® herbicide** followed by **Raptor** (or **Raptor** followed by **Pursuit**) within a 60 day timeframe due to increased potential alfalfa crop response.

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## WEEDS CONTROLLED

**Raptor® herbicide** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

<b>Broadleaf Weeds Controlled by Raptor</b>			
	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
	Maximum Weed Size (inches)		
Bedstraw		3	3
Beet, wild	3	3	3
Buckwheat, wild		3	3
Buttercup		3	3
Canola, volunteer	3	3	3
Cocklebur, common	3	3	3
Flixweed	3	3	3
Flaree,			
Redstem			3
Whitestem			3
Henbit			2
Knotweed, prostrate		3	3
Kochia <sup>1</sup>		3	3
Lambsquarters, common	3 <sup>2</sup>	3	3
Lettuce, miners		3	3
Jimsonweed	3	3	3
Mallow,			
Common	3	3	3
Venice		1	1
Morningglory,			
Entireleaf		3	3
Ivyleaf		3	3
Smallflower		3	3
Tall		3	3
Mustard,			
Tumble ( <i>Sisymbrium altissimum</i> )	3	3	3
Wild ( <i>Brassica kaber</i> )	3	3	4
Black ( <i>Brassica nigra</i> )	3	3	4
Nightshade,			
Black	3	5	5
Eastern black	3	5	5
Hairy	3	4	5
Nettle, burning		2	2
Nettleleaf goosefoot	3	3	3
Pennycress, field	3	3	3
Pigweed,			
Redroot	3	4	5
Smooth	3	4	4
Spiny	3	3	3

<b>Broadleaf Weeds Controlled by Raptor (Cont.)</b>			
	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
	Maximum Weed Size (inches)		
Purslane, common			3
Radish, wild	3	3	3
Rocket, London		3	3
Rocket, yellow		4	4
Shepherdspurse			3
Smartweed,			
Ladysthumb	3	3	3
Pennsylvania	3	3	3
Swamp		3	3
Spurge, prostrate		3	3
Sunflower, common		3	3
Swinecress		3	3
Tansymustard, green	3	3	4
Thistle, Russian		3	3
Velvetleaf	3	4	5
Willoweed panicle		3	3

<sup>1</sup> **Raptor** controls non-ALS resistant kochia only.

<sup>2</sup> **Raptor** controls common lambsquarters at 4 oz/A east of the Rocky Mountains.

<b>Broadleaf Weeds Suppressed by Raptor Applications</b>			
	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
	Maximum Weed Size (inches)		
Chickweed, common	3	3	3
Dandelion			3
Dock, curly		3	3
Dodder <sup>1</sup>			3
Fiddleneck			3
Ragweed,			
Common		3	3
Giant		3	3
Thistle, Canada			3
Shepherdspurse	3	3	
Sowthistle		3	3

<sup>1</sup> For suppression of dodder, apply **Raptor** after the dodder has emerged until soon after dodder attaches to the alfalfa.

<b>Grass Weeds Controlled by Raptor</b>			
	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
	Maximum Weed Size (inches)		
Barnyardgrass		3	3
Blackgrass	3	3	3

**Grass Weeds Controlled by Raptor® Herbicide (Cont.)**

	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
	Maximum Weed Size (inches)		
<b>Brome,</b>			
California	3	3	3
Downy	3	3	3
Cheat	3	3	3
Japanese	3	3	3
Canarygrass, littleseed	3	3	3
<b>Cereals, volunteer</b>			
Barley	3	3	3
Oat	3	3	3
Wheat (non-CLEARFIELD®)	3	3	3
Corn, volunteer	4	5	8
Crabgrass, large		3	3
Darnel, Persian	3	3	3
<b>Foxtail,</b>			
Giant	3	4	5
Green	3	3	4
Yellow	3	3	4
Johnsongrass, seedling		3	3
Jointed goatgrass	3	3	3
Lovegrass	3	3	3
Millet, wild proso		3	3
Oats, wild	3	3	3
Ryegrass, Italian	3	3	3
Rye, feral or cereal		3	3
Shattercane	3	4	5

**Grass Weeds Suppressed by Raptor Applications**

	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
	Maximum Weed Size (inches)		
Bluegrass, annual			3
Johnsongrass, rhizome			3
<b>Sedges,</b>			
Purple			3
Yellow			3
Quackgrass			3

**TANK MIX COMBINATIONS WITH OTHER HERBICIDES**

To control weeds not listed on the **Raptor** label, herbicides such as **Buctril®** (seedling alfalfa only), **2,4-DB**, **Poast®** herbicide or **Poast Plus®** herbicide or

**Prism®/Select®** may be tank mixed with **Raptor**. When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded.

**CHICORY****DIRECTIONS FOR USE**

Apply **Raptor** as an early postemergence treatment when weeds are actively growing and before they exceed a height of 3 inches, unless otherwise indicated. Apply **Raptor** herbicide as an early postemergence treatment when chicory has at least two and no more than four fully expanded true leaves present. Do not apply to chicory subjected to stress conditions such as hail damage, flooding, drought, injury from other herbicides, or widely fluctuating temperatures, as crop injury may result.

THIS PRODUCT WHEN USED IN CHICORY MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

**USE RATE**

Apply **Raptor** postemergence only at a rate of 0.031 lb imazamox a.e./acre (4 oz **Raptor** per acre). At this rate one gallon of **Raptor** will treat 32 acres of chicory. It is recommended that a registered soil-applied grass herbicide be used prior to use of **Raptor**.

APPLICATIONS OF **RAPTOR** REQUIRE THE ADDITION OF A SURFACTANT. Refer to the **MIXING INSTRUCTIONS** section for specific surfactant types and rates.

**ADDITION OF NITROGEN FERTILIZER SUCH AS 28-0-0 OR 32-0-0 LIQUID FERTILIZER MAY IMPROVE WEED CONTROL BUT ALSO INCREASES THE LIKELIHOOD OF INJURY TO CHICORY.**

Add liquid fertilizer at a rate of 2.5% v/v.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces per acre of **Raptor**) during the growing season. **For use in Nebraska, Wyoming, Colorado and Montana only.**

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## WEEDS CONTROLLED

<b>Broadleaf Weeds Controlled by Raptor® Herbicide</b>	
	<b>Raptor at 4 fl oz/A with a surfactant</b>
	<b>Maximum Weed Size (inches)</b>
Beet, wild	3
Jimsonweed	3
Flixweed	3
Lambsquarters	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

<b>Grass Weeds Controlled by Raptor</b>	
	<b>Raptor at 4 fl oz/A with a surfactant</b>
	<b>Maximum Weed Size (inches)</b>
Brome,	
Downy	3
Cheat	3
Japanese	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD®)	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Shattercane	3

### Grass Weeds Suppressed by Raptor Applications

	<b>Raptor at 4 fl oz/A with a surfactant</b>
	<b>Maximum Weed Size (inches)</b>
Crabgrass,	
Large	3
Smooth	3
Sedges,	
Purple	3
Yellow	3
Quackgrass	3

## CLEARFIELD® CANOLA

### DIRECTIONS FOR USE

**Raptor** is effective in controlling weeds in conservation tillage and conventional production systems. **Raptor** can be applied early postemergence in **CLEARFIELD®** Canola but before the bloom stage. Refer to the specific treatment under the **SPRAYING INSTRUCTIONS** section of the label.

### USE RATE

Apply **Raptor** postemergence only at a rate of 0.031 lb imazamox a.e./acre (4 oz **Raptor** per acre). At this rate one gallon of **Raptor** will treat 32 acres of **CLEARFIELD®** Canola. It is recommended that a registered soil applied grass herbicide be used prior to use of **Raptor**.

A surfactant and a nitrogen fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANT** section under **MIXING INSTRUCTIONS** for specific instructions.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces of **Raptor**) during the growing season.

### WEEDS CONTROLLED

**Raptor** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

<b>Broadleaf Weeds Controlled by Raptor</b>	
	<b>Maximum Weed Size (inches)</b>
Beet, wild	3
Canola, volunteer (non-CLEARFIELD®)	3
Chickweed, common	3
Cocklebur, common	3
Jimsonweed	3

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<b>Broadleaf Weeds Controlled by Raptor® Herbicide (Cont.)</b>	
	<b>Maximum Weed Size (inches)</b>
Flixweed	3
Lambsquarters, common	3 <sup>1</sup>
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Radish, wild	3
Shepherdspurse	3
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Tansymustard, green	3
Velvetleaf	3

<sup>1</sup> Raptor controls common lambsquarters at 4 oz/A east of the Rocky Mountains

<b>Broadleaf Weeds Suppressed by Raptor</b>	
	<b>Maximum Weed Size (inches)</b>
Buckwheat, wild	3
Flax	2
Knotweed, prostrate	3
Lettuce, miners	3
Morningglory	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Rocket, London	3
Rocket, Yellow	3
Spurge, prostrate	3
Thistle, Russian (non-ALS resistant)	3

<b>Grass Weeds Controlled by Raptor</b>	
	<b>Weed Size</b>
	<b>Number of Leaves (maximum tillers)</b>
Blackgrass	1-4 (1)
Brome,	
Downy	1-5 (2)
Cheat	1-5 (2)
Japanese	1-5 (2)
Canarygrass, littleseed	1-5 (2)
Cereals, volunteer	
Barley	1-5 (1)
Oat	1-5 (1)
Wheat (non-CLEARFIELD*)	1-4 (1)
Darnel, Persian	1-5 (2)
Foxtail,	
Giant	1-6 (2)
Green	1-4 (1)
Yellow	1-4 (1)
Jointed goatgrass	1-6 (2)
Oats, wild	1-5 (2)
Ryegrass, Italian	1-4 (1)
Rye, feral or cereal	1-4 (1)
Shattercane	1-6 (2)

<b>Grass Weeds Suppressed by Raptor Applications</b>	
	<b>Weed Size</b>
	<b>Number of Leaves (maximum tillers)</b>
Barnyardgrass	1-4 (1)
Corn, volunteer	1-4 (1)
Crabgrass, large	1-4 (1)

**SPECIFIC WEED PROBLEMS**

**Canada Thistle:** For enhanced activity of Canada thistle, add Stinger™ herbicide to the tank mixture. Apply to Canada thistle in the rosette stage.

**CLEARFIELD\* SUNFLOWER**

**DIRECTIONS FOR USE**

Raptor is effective in controlling weeds in conservation and conventional tillage production systems. Raptor can be applied early postemergence in CLEARFIELD\* Sunflower (imidazolinone tolerant sunflower) varieties. Apply only on selected sunflower varieties labeled as "CLEARFIELD\*" and warranted by the seed supplier to possess tolerance to direct application of Raptor. **DO NOT** apply Raptor to sunflower varieties which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or

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BASF to obtain information regarding **CLEARFIELD\*** sunflower varieties. Refer to the specific treatment under the **SPRAYING INSTRUCTIONS** section of the label.

**Apply Raptor® herbicide as an early postemergence treatment when weeds are actively growing and before broadleaf weeds exceed a height of 3 inches and grasses exceed 4-5 leaves** (unless otherwise indicated, refer to weed control tables for specific weed sizes). Under conditions of cold temperatures (less than 50° F, maximum day-time temperatures), weed control may be less than optimal. Make application when the majority of weeds are at the recommended growth stage.

When adequate soil moisture is present, **Raptor** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Occasionally, reduction in plant height or temporary yellowing of crop plants may occur following **Raptor** applications. These effects can be more pronounced if crops are growing under stressful environmental conditions. These effects are temporary. Normal growth and appearance should resume within 1 to 2 weeks.

For best weed control and to provide the highest crop competitive advantage, apply **Raptor** to actively growing **CLEARFIELD\*** sunflowers. Plant a locally adapted **CLEARFIELD\*** sunflower variety at the normal seeding rate for your geography. Apply to sunflower after the first pair of true leaves have unfolded and up to and including the fourth pair of leaves are unfolded (2-8 leaf stage).

### RAPTOR APPLICATION TIMING - SUNFLOWER

Apply **Raptor** at the following crop and weed stages of growth:

<b>CLEARFIELD SUNFLOWERS</b>	<b>2-8 LEAF STAGE</b>
Broadleaf weeds	Refer to weed control tables for specific weed sizes.
Grass weeds	

### USE RATE

Apply **Raptor** postemergence only at a rate of 0.031 lb imazamox a.e./acre (4 oz. **Raptor** per acre). At this rate one gallon of **Raptor** will treat 32 acres of **CLEARFIELD\*** Sunflowers. It is recommended that a registered soil-applied grass herbicide like **Prowl® 3.3 EC herbicide** be used prior to use of **Raptor**.

A nonionic surfactant **and** nitrogen-based fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANTS** section

under **MIXING INSTRUCTIONS** for specific instructions.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces **Raptor** per acre) during the growing season.

<b>Broadleaf Weeds Controlled by Raptor Alone, or in a Sequential<sup>1</sup> Program</b>		
	<b>Application Rate</b>	
	<b>Raptor Postemergence Alone</b>	<b>Prowl 3.3 EC Soil Applied Followed by Raptor<sup>1</sup> Postemergence</b>
	<b>4 oz/A</b>	<b>4 oz/A</b>
	<b>Maximum Weed Size (Inches)</b>	
Beet, wild	3	3
Chickweed, common	3	3-5
Cocklebur, common	3	3
Jimsonweed	3	3-6
Kochia <sup>2</sup>		1-4
Lambsquarters, common	3	3-5
Marshelder	4	4
Mustard spp.	2-8	2-8
Nightshade,		
Black	2-5	2-5
Eastern black	2-5	2-5
Hairy	2-5	2-5
Pigweed,		
Redroot	3	3-8
Smooth	3	3-8
Spiny	3	3-5
Puncturevine		1-3
Purslane, common		1-3
Radish, wild	3	3-4
Smartweed,		
Ladysthumb	2-5	2-5
Pennsylvania	2-5	2-5
Spurge, prostrate		3-4
Sunflower, wild or volunteer (non-CLEARFIELD*)	2-6	2-6
Tansymustard	3	3
Velvetleaf	3	3-8

<sup>1</sup> Soil-applied grass herbicide such as **Prowl** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> Control of light to moderate populations of ALS susceptible biotypes only.

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**Broadleaf Weeds Suppressed by Raptor® Herbicide Alone, or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl® 3.3 EC Herbicide Soil Applied Followed by Raptor <sup>1</sup> Postemergence
	4 oz/A	4 oz/A
Maximum Weed Size (inches)		
Bindweed,		
Field (seedling)	2-4	2-4
Hedge (seedling)	2-4	2-4
Buckwheat, wild	1-3	1-3
Flax	2	2
Knotweed, prostrate	3	3
Lettuce, miners	3	3
Mallow, Venice		1-4
Morningglory,		
Entireleaf	3	3
Ivyleaf	3	3
Smallflower	3	3
Tall	3	3
Rocket, London	3	3
Rocket, Yellow	3	3
Spurge, prostrate	3	
Sowthistle, annual	2-4	2-4
Thistle, Canada	2-5	2-5
Thistle, Russian	3	3
(non-ALS resistant) <sup>2</sup>		

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> Control of light to moderate populations of ALS susceptible biotypes only.

**Grass Weeds Controlled by Raptor Alone, or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil Applied Followed by Raptor <sup>1</sup> Postemergence
	4 oz/A	4 oz/A
Number of Leaves (maximum tillers)		
Barley, wild	2-4	2-4
Barnyardgrass	3 <sup>2</sup>	3-5
Blackgrass	1-4 (1)	1-4 (1)
Brome,		
Downy	1-5 (2)	1-5 (2)
Cheat	1-5 (2)	1-5 (2)
Japanese	1-5 (2)	1-5 (2)
Canarygrass, littleseed	1-5 (2)	1-5 (2)

**Grass Weeds Controlled by Raptor Alone, or in a Sequential<sup>1</sup> Program (Cont.)**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil Applied Followed by Raptor <sup>1</sup> Postemergence
	4 oz/A	4 oz/A
Number of Leaves (maximum tillers)		
Crabgrass,		
Large		1-4
Smooth		1-4
Cupgrass, woolly <sup>3</sup>		1-4
Darnel, Persian	1-5 (2)	1-5 (2)
Foxtail,		
Giant	1-6 (2)	1-6 (2)
Green	1-6 (1)	1-6 (1)
Yellow	1-6 (1)	1-6 (1)
Goosegrass		1-4 (1)
Goatgrass, jointed	1-5 (2)	1-5 (2)
Millet, wild proso	2-4 <sup>2</sup>	2-4
Oats, wild	1-5 (2)	1-5 (2)
Panicum,		
Fall	1-5	1-5
Texas		1-5
Sandbur, field <sup>3</sup>		2-5
Shattercane	2-8	2-8
Signalgrass, broadleaf	2-5 <sup>2</sup>	2-5
Stinkgrass		2-4
Volunteer cereals		
(non-CLEARFIELD*)	1-6 (3)	1-6 (3)
Witchgrass		2-5

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a post-emergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> Control of light to moderate populations only. For control of heavier populations use a SEQUENTIAL APPLICATION with a soil-applied grass herbicide as described above.

<sup>3</sup> For control a dinitroaniline (DNA) herbicide such as **Prowl 3.3 EC** must be soil-applied at a full-labeled rate.

**Grass Weeds Suppressed by Raptor Alone, or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil Applied Followed by Raptor <sup>1</sup> Postemergence
	4 oz/A	4 oz/A
Number of Leaves (maximum tillers)		
Crabgrass,		
Large	1-4 (1)	
Smooth	1-4 (1)	

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**Grass Weeds Suppressed by Raptor® Herbicide Alone, or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl® 3.3 EC Herbicide Soil Applied Followed by Raptor <sup>1</sup> Postemergence
	4 oz/A	4 oz/A
	Number of Leaves (maximum tillers)	
Cupgrass, woolly	1-3	
Goosegrass	1-3	
Itchgrass		2-5
Quackgrass		4-8
Stinkgrass	2-4	
<b>SEDGES</b>		
Nutsedge,		
Purple	1-3	1-3
Yellow	1-3	1-3

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

**CLEARFIELD\* SPRING WHEAT**

**DIRECTIONS FOR USE**

**Raptor** can be applied postemergence on **CLEARFIELD\*** Wheat (imidazolinone tolerant wheat) varieties. Apply only on selected spring wheat varieties labeled as "**CLEARFIELD\***" and warranted by the seed supplier to possess tolerance to direct application of certain imidazolinone herbicides. **DO NOT** apply **Raptor** to wheat varieties which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or BASF to obtain information regarding **CLEARFIELD\*** wheat varieties.

**Apply Raptor as an early postemergence treatment when weeds are actively growing and before broadleaf weeds exceed a height of 3 inches and grasses exceed 4-5 leaves** (unless otherwise indicated). Under conditions of cold temperatures (less than 40° F maximum daytime temperatures), weed control may be less than optimal. A thin stand of wheat may result in unacceptable weed control. **Raptor** is effective in controlling weeds in conservation tillage and conventional tillage wheat production systems. Delay application until the majority of the weeds are at the recommended growth stage. When a mixture of grasses and broadleaf weeds are present, time the application to the grass weeds for optimum control.

When adequate soil moisture is present, **Raptor** will provide residual activity of susceptible germi-

nating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Occasionally, reduction in plant height or temporary yellowing of crop plants may occur following **Raptor** applications. These effects can be more pronounced in spray overlap areas and/or if crops are growing under stressful environmental conditions (such as, but not limited to, drought, excessive moisture, improper fertility, improper varietal adaptation, poor planting conditions, etc.). To avoid possible crop injury, do not apply **Raptor** to **CLEARFIELD\*** wheat when extreme cold temperatures (less than 40° F maximum daytime temperatures) are expected within one week of application. Crop response associated with stress conditions and overlaps shall be the responsibility of the user.

Weed control is optimized when **Raptor** is applied to actively growing wheat. Plant a locally adapted **CLEARFIELD\*** variety at the normal seeding rate for your geography. Apply to wheat after tiller initiation has begun and prior to the jointing stage of growth (and when the weeds are at the appropriate size - see **WEEDS CONTROLLED** tables).

**RAPTOR APPLICATION TIMING**

Apply **Raptor** at the following crop and weed stages of growth:

<b>CLEARFIELD* SPRING WHEAT</b>	<b>4-LEAF TO PRIOR TO JOINT</b>
Broadleaf weeds	Refer to weed control tables for specific weed sizes.
Grass weeds	

**USE RATE**

**SPRING WHEAT:**

APPLY 0.031 lb imazamox a.e./acre (4 FLUID OUNCES OF **RAPTOR** PER ACRE). See **WEEDS CONTROLLED** section for detailed use rate recommendations.

A surfactant and nitrogen based fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANTS** section under **MIXING INSTRUCTIONS** for specific instructions.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces of **Raptor** per acre) during the growing season.

There are no restrictions following an application of **Raptor** for feeding or grazing of wheat forage and hay.



## WEEDS CONTROLLED - SPRING WHEAT

**Raptor® herbicide** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

<b>Broadleaf Weeds Controlled by Raptor (4 Ounces per Acre)</b>	
	<b>Weed Size Maximum Size (Inches)</b>
Canola, volunteer	5
Chickweed, common	3
Cocklebur, common	3
Flixweed	3
Henbit	3
Knotweed, prostrate	3
Lambsquarters, common <sup>1</sup>	1
Mallow,	
Common	3
Venice	1
Mustard,	
Tumble	3
Wild	4
Black	4
Blue	4
Nightshade,	
Black	5
Eastern black	5
Hairy	5
Pennycress, field	3
Pigweed,	
Redroot	5
Smooth	4
Spiny	3
Purslane, common	3
Radish, wild	3
Rocket, London	5
Rocket, yellow	5
Shepherdspurse	5
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3
Tansymustard, green	4
Thistle, Russian (non-ALS resistant)	3
Velvetleaf	3

<sup>1</sup> **Raptor** provides suppression of common lambsquarters East of the Rocky Mountains.

## Broadleaf Weeds Suppressed by Raptor Applications (4 Ounces per Acre)

	<b>Weed Size Maximum Size (Inches)</b>
Bedstraw	3
Buckwheat, wild <sup>1</sup>	3
Dandelion	3
Ragweed,	
Common	3
Giant	3
Thistle, Canada	3

<sup>1</sup> See **SPECIFIC WEED PROBLEMS** section for more information.

## Grass Weeds Controlled by Raptor - Spring Wheat (4 Ounces per Acre)

	<b>Weed Size Number of Leaves (maximum tillers)</b>
Barnyardgrass	1-5 (1)
Brome,	
California	1-5 (2)
Downy	1-5 (2)
Cheat	1-5 (2)
Japanese	1-5 (2)
Canarygrass, littleseed	1-5 (2)
Cereals, volunteer	
Barley	1-6 (1)
Oat	1-6 (1)
Wheat (non-CLEARFIELD®)	1-4 (1)
Corn, volunteer (non-CLEARFIELD®)	1-4
Crabgrass, large	1-4 (1)
Darnel, Persian	1-5 (2)
Foxtail,	
Giant	1-6 (2)
Green	1-4 (1)
Yellow	1-4 (1)
Jointed goatgrass	1-5 (2)
Oats, wild <sup>1</sup>	1-5 (2)
Rescuegrass	1-4 (1)
Ryegrass, Italian <sup>1</sup>	1-4 (1)
Rye, feral or cereal <sup>1</sup>	1-4 (1)

<sup>1</sup> See **SPECIFIC WEED PROBLEMS** section.

## SPECIFIC WEED PROBLEMS

**Feral Rye (cereal, volunteer rye):** **Raptor** controls emerged feral rye only. Apply to feral rye before the first tiller forms. Once feral rye develops tillers, control is significantly reduced.

**Italian Ryegrass:** **Raptor** controls emerged Italian Ryegrass only. Under favorable growing conditions, ryegrass may germinate over several weeks.

**Kochia:** Naturally occurring ALS/AHAS resistant biotypes of kochia are common in wheat fields. In many cases, a tank mixture with **Raptor® herbicide** will be required for acceptable control. Apply **Raptor** in a tank mixture with a herbicide(s) recommended to control on kochia (e.g. **Clarity® herbicide + 2,4-D**). Apply to kochia 2 inches in size or less.

**Wild Buckwheat:** For enhanced control of wild buckwheat, add Starane® herbicide or **Clarity** to the tank mixture. Apply to wild buckwheat with no more than 2 true leaves.

**Wild Oats:** **Raptor** controls emerged wild oats only. Under favorable growing conditions, wild oats may germinate over several weeks. **Raptor** does not provide residual control of wild oats.

### TANK MIX HERBICIDE COMBINATIONS WITH RAPTOR

**Recommended tank mixes for postemergence applications of Raptor on CLEARFIELD® wheat varieties are the following herbicides:**

<b>Banvel®</b>	<b>Clarity®</b>
Bronate™	Curtail® M
(bromoxynil + MCPA)	2,4-D Ester
Buctril®	MCPA
	Starane®

Limit bromoxynil applications (Bronate or Buctril) to 0.5 lb/acre of active ingredient when tankmixed with **Raptor**.

When broadleaf herbicides are tankmixed with **Raptor**, there may be some reduction in weed control, particularly grass weeds.

**ALS inhibiting herbicides such as Ally®, Amber®, Everest®, Finesse®, Express®, Harmony® Extra, Maverick® and Silverado® herbicides should not be tankmixed with Raptor. Raptor tankmixes with ALS inhibiting herbicides may result in unacceptable crop response.**

When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods and proper timing of application, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label use directions and precautions.

## CLEARFIELD® WINTER WHEAT

### DIRECTIONS FOR USE

**Raptor** can be applied postemergence on **CLEARFIELD®** Wheat (imidazolinone tolerant wheat) varieties. Apply only on selected winter wheat varieties labeled as "**CLEARFIELD®**" and warranted by the seed supplier to possess toler-

ance to direct application of certain imidazolinone herbicides. **DO NOT** apply **Raptor** to wheat varieties which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or BASF to obtain information regarding **CLEARFIELD®** wheat varieties.

**Apply Raptor as an early postemergence treatment when weeds are actively growing and before broadleaf weeds exceed a height of 3 inches and grasses exceed 4-5 leaves** (unless otherwise indicated). Under conditions of cold temperatures (less than 40° F, maximum daytime temperatures), weed control may be less than optimal. A thin stand of wheat may result in unacceptable weed control. **Raptor** is effective in controlling weeds in conservation tillage and conventional tillage wheat production systems. **Raptor** can be applied in the fall/winter or spring for winter or spring annual weed control, respectively. Delay application until the majority of the weeds are at the recommended growth-stage. When a mixture of grasses and broadleaf weeds are present, time the application to the grass weeds for optimum control.

When adequate soil moisture is present, **Raptor** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Occasionally, reduction in plant height or temporary yellowing of crop plants may occur following **Raptor** applications. These effects can be more pronounced in spray overlap areas and/or if crops are growing under stressful environmental conditions (such as, but not limited to, drought, excessive moisture, improper fertility, improper varietal adaptation, poor planting conditions, etc.). To avoid possible crop injury, do not apply **Raptor** to **CLEARFIELD®** wheat when extreme cold temperatures (less than 40° F, maximum daytime temperatures) are expected within one week of application. Crop response associated with stress conditions and overlaps shall be the responsibility of the user.

Weed control is optimized when **Raptor** is applied to actively growing wheat. Plant a locally adapted **CLEARFIELD®** variety at the normal seeding rate for your geography. Apply to wheat after tiller initiation has begun and prior to the jointing stage of growth (and when the weeds are at the appropriate size - see **WEEDS CONTROLLED** tables).

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## RAPTOR® HERBICIDE APPLICATION TIMING - WINTER WHEAT

Apply **Raptor** at the following crop and weed stages of growth:

<b>CLEARFIELD* WINTER WHEAT</b>	<b>AFTER TILLER INITIATION AND PRIOR TO JOINT</b>
Broadleaf weeds	Refer to weed control tables for specific weed sizes.
Grass weeds	

### USE RATE

#### WINTER WHEAT:

APPLY 0.031-0.047 LB IMAZAMOX A.E./A (4-6 FLUID OUNCES OF **RAPTOR** PER ACRE). See **WEEDS CONTROLLED** section for detailed use rate recommendations.

A surfactant **and** nitrogen-based fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANTS** section under **MIXING INSTRUCTIONS** for specific instructions.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** apply more than 0.062 lb imazamox a.e./acre (8 ounces of **Raptor**® herbicide per acre) during the growing season.

There are no restrictions following an application of **Raptor** for feeding or grazing of wheat forage and hay.

Application of **Raptor** to weeds, which have been grazed, may result in reduced weed control. For optimum weed control, allow a period of 7 days between the end of grazing and **Raptor** application for weed regrowth to occur. Under cold conditions, wait until new growth of weeds is evident before applying **Raptor** in fields which have been grazed.

### WEEDS CONTROLLED - WINTER WHEAT

**Raptor** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

Broadleaf Weeds Controlled by Raptor		
	Application Rate	Weed Size
	Ounces/Acre	Maximum Size (Inches)
Wild beet	4-6	3
Canola, volunteer	4-6	5
Chickweed, common	4-6	3
Cocklebur, common	4-6	3
Filaree,		
Redstem	5-6	3
Whitestem	5-6	3

### Broadleaf Weeds Controlled by Raptor (Cont.)

	Application Rate	Weed Size
	Ounces/Acre	Maximum Size (Inches)
Flixweed	4-6	3
Henbit	5-6	3
Knotweed, prostrate	5-6	3
Lambsquarters, common	4-6 <sup>1</sup>	1
Lettuce, miners	5-6	3
Jimsonweed	4-6	3
Mallow,		
Common	5-6	3
Venice	5-6	1
Morningglory,		
Entireleaf	5-6	3
Ivyleaf	5-6	3
Smallflower	5-6	3
Tall	5-6	3
Mustard,		
Tumble	4-6	3
Wild	4-6	4
Black	4-6	4
Blue	4-6	4
Nightshade,		
Black	4-6	5
Eastern black	4-6	5
Hairy	4-6	5
Pennycress, field	4-6	3
Pigweed;		
Redroot	4-6	5
Smooth	4-6	4
Spiny	4-6	3
Purslane, common	4-6	3
Radish, wild	4-6	3
Rocket, London	5-6	5
Rocket, yellow	5-6	5
Shepherdspurse	4-6	5
Smartweed,		
Ladysthumb	4-6	3
Pennsylvania	4-6	3
Swamp	5-6	3
Spurge, prostrate	5-6	3
Tansymustard, green	4-6	4
Thistle, Russian (non-ALS resistant)	5-6	3
Velvetleaf	4-6	3

<sup>1</sup> **Raptor** controls common lambsquarters at 4 oz./A east of the Rocky Mountains. Apply 5-6 oz/A west of the Rocky Mountains.

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**Broadleaf Weeds Suppressed by Raptor® Herbicide Applications**

	Application Rate	Weed Size
	Ounces/Acre	Maximum Size (Inches)
Bedstraw	5-6	3
Buckwheat, wild <sup>1</sup>	5-6	3
Dandelion	5-6	3
Fiddleneck	5-6	3
Primrose,		
Cutleaf	5-6	3
Evening	5-6	3
Ragweed,		
Common	5-6	3
Giant	5-6	3
Thistle, Canada	5-6	3

<sup>1</sup> See **SPECIFIC WEED PROBLEMS** section for more information.

**Grass Weeds Controlled by Raptor - Winter Wheat**

	Application Rate	Weed Size
	Ounces/Acre	Number of Leaves (maximum tillers)
Barnyardgrass	5-6	1-5 (1)
Brome,		
California	4-6	1-5 (2)
Downy	4-6	1-5 (2)
Cheat	4-6	1-5 (2)
Japanese	4-6	1-5 (2)
Canarygrass, littleseed	4-6	1-5 (2)
Cereals, volunteer		
Barley	4-6 <sup>1</sup>	1-6 (1)
Oat	4-6 <sup>1</sup>	1-6 (1)
Wheat (non-CLEARFIELD*)	4-6 <sup>1</sup>	1-4 (1)
Corn, volunteer (non-CLEARFIELD*)	4-6	1-4
Crabgrass, large	5-6	1-4 (1)
Darnel, Persian	4-6	1-5 (2)
Foxtail,		
Giant	4-6	1-6 (2)
Green	4-6	1-4 (1)
Yellow	4-6	1-4 (1)
Johnsongrass, seedling	5-6	1-5 (1)
Jointed goatgrass	4-6	1-5 (2)
Oats, wild <sup>1</sup>	4-6	1-5 (2)
Rescuegrass	4-6	1-4 (1)
Ryegrass, Italian <sup>1</sup>	4-6	1-4 (1)
Rye, feral or cereal <sup>1</sup>	4-6	1-4 (1)

**Grass Weeds Suppressed by Raptor Applications**

	Application Rate	Weed Size
	Ounces/Acre	Number of Leaves (maximum tillers)
Brome,		
California	4-6	6+ (3+)
Downy	4-6	6+ (3+)
Cheat	4-6	6+ (3+)
Japanese	4-6	6+ (3+)
Fescue, rattail	4-6	1-3
Johnsongrass, rhizome	6	1-5
Jointed goatgrass	4-6	6+(3+)
Sedges		
Purple	6	1-3
Yellow	6	1-3
Quackgrass	6	1-5

<sup>1</sup> See **SPECIFIC WEED PROBLEMS** section.

**Specific Weed Problems**

**Raptor** is most effective for grass control when applied in the fall. If summer annual broadleaf weeds germinate in the spring, (following a fall application of **Raptor**) a broadleaf herbicide may need to be applied. If the **Raptor** application is made in the spring, the broadleaf herbicide may be tank mixed with **Raptor**. For improved control of grasses such as feral rye, Italian ryegrass, and downy brome, use higher rates of nitrogen fertilizer up to 50% of the spray solution. Higher rates of nitrogen can improve grass weed control with **Raptor**, especially under drought stress conditions.

**Feral Rye (cereal, volunteer rye):** **Raptor** controls emerged feral rye only. Apply to feral rye before the first tiller forms. Once feral rye develops tillers, control is significantly reduced. If feral rye germinates in the fall, an application of **Raptor** in the fall will provide the best control. If feral rye germinates following an application of **Raptor** in the fall, a spring application may be necessary for control of subsequent germination flushes. **Raptor** only suppresses feral rye in Texas and Oklahoma.

**Italian Ryegrass:** **Raptor** controls emerged Italian Ryegrass only. Under favorable growing conditions, ryegrass may germinate over several weeks (especially in the Southern U.S.). **Raptor** does not provide residual control of Italian ryegrass. Due to the potential for multiple germination flushes, Italian ryegrass control in Oklahoma, Texas and New Mexico may not be satisfactory. Optimum application timing is to ryegrass with 3-4 leaves and before the first tiller. Weed control is reduced when tillers develop. In the Pacific Northwest a spring application of 6 oz/Acre of **Raptor** is recommended to achieve the most consistent control. If

Italian ryegrass germinates following a fall application, a spring application may be necessary. Apply the higher recommended rate when Italian ryegrass is at the maximum recommended size, or to heavy grass populations.

**Kochia:** Naturally occurring ALS/AHAS resistant biotypes of kochia are common in wheat fields. In many cases, a tank mixture with **Raptor® herbicide** will be required for acceptable control. If **Raptor** is applied in the spring, apply **Raptor** in a tank mixture with a herbicide(s) recommended to control kochia (i.e. **Clarity® herbicide** + 2,4-D). Apply to kochia 2 inches in size or less.

**Wild Buckwheat:** For enhanced control of wild buckwheat, add Starane® herbicide or **Clarity** to the tank mixture. Apply to wild buckwheat with no more than 2 true leaves.

**Wild Oats:** **Raptor** controls emerged wild oats only. Under favorable growing conditions, wild oats may germinate over several weeks (especially in the Southern US). **Raptor** does not provide residual control of wild oats. Due to the potential for multiple germination flushes, wild oat control in Oklahoma, Texas and New Mexico may not be satisfactory.

## TANK MIX HERBICIDE COMBINATIONS WITH RAPTOR

**Recommended Tank Mixes For Postemergence Applications of Raptor on CLEARFIELD® Wheat Varieties are the following herbicides:**

<b>Banvel®</b>	<b>Clarity®</b>
Bronate™	Curtail® M
(bromoxynil +	2,4-D Ester
MCPA)	MCPA
Buctril®	Starane®

Limit bromoxynil applications (Bronate or Buctril) to 0.5 lb/acre of active ingredient when tankmixed with **Raptor**.

When broadleaf herbicides are tankmixed with **Raptor**, there may be some reduction in weed control, particularly grass weeds.

**Sulfonylurea herbicides such as Ally®, Amber®, Everest®, Finesse®, Express®, Harmony® Extra and Maverick® herbicides should not be tankmixed with Raptor. Raptor tankmixes with sulfonylurea herbicides may result in unacceptable crop response.**

When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods and proper timing of application, weeds

controlled, restrictions and precautions. Always use in accordance with the more restrictive label use directions and precautions.

## CRIMSON, RED AND WHITE CLOVER GROWN FOR SEED

### DIRECTIONS FOR USE

**NOT FOR USE IN CALIFORNIA**

### APPLICATION INSTRUCTIONS

#### APPLICATION TIMING:

Apply **Raptor** as an early postemergence treatment in a tankmix as described below when the crimson, red, and white clover has a minimum of 2 trifoliate leaves and when the majority of the weeds are 1-3 inches. **Raptor** applications must be made prior to clover bloom.

#### USE RATE

Apply **Raptor** at a broadcast rate of 0.04 lb imazamox a.e. per acre (5 ounces **Raptor**) per acre postemergence only.

APPLICATIONS OF **RAPTOR** IN CLOVER GROWN FOR SEED REQUIRE THE ADDITION OF A SURFACTANT, NITROGEN FERTILIZER AND **BASAGRAN® HERBICIDE**.

#### I. ADJUVANTS:

**Nonionic Surfactant:** Use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 0.25% v/v (1 quart per 100 gallons of spray solution)

OR

**Crop Oil Concentrate:** Use a crop oil concentrate at 1 pint/acre (0.5 gallons/100 gallons of spray solution).

#### II. NITROGEN FERTILIZER:

Recommended nitrogen-based fertilizers include liquid fertilizers (such as 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray-grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

#### III. Basagran® herbicide:

Add **Basagran** at 8 to 16 fluid ounces per acre to minimize crop response. **Basagran** applications at rates higher than 16 fluid ounces per acre may reduce grass control. **Basagran** may only be applied to clover grown for seed.

**Raptor** plus **Basagran** tank mix should be applied a minimum of four hours before rainfall or overhead irrigation.

## CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** make more than one **Raptor® herbicide** application (0.04 lb a.e. per acre imazamox) per growing season.

If arid conditions occur during the year of application, rotational crop injury may occur.

**DO NOT** apply to clover 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** apply to weeds under stress, such as lack of moisture, previous herbicide injury, mechanical injury or cold temperatures, as unsatisfactory control could result.

**DO NOT** apply more than a total of 4 pints of **Basagran® herbicide** per acre, per calendar year or 2.0 pounds of bentazon active ingredient (a.i.) from all sources per acre, per calendar year.

## WEEDS CONTROLLED

**Raptor** will control or suppress the weeds listed below when applied postemergence to 1 to 3 inch weeds (unless otherwise indicated) at the recommended rates listed below.

<b>Broadleaf Weeds Controlled by Raptor</b>	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
Maximum Weed Size (inches)	
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Cocklebur, common	3
Flixweed	3
Jimsonweed	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3

<b>Broadleaf Weeds Controlled by Raptor (Cont.)</b>	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
Maximum Weed Size (inches)	
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3
Velvetleaf	3

<b>Broadleaf Weeds Suppressed by Raptor</b>	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
Maximum Weed Size (inches)	
Buckwheat, wild	3
Chickweed, common	3
Knotweed, prostrate	3
Kochia <sup>1</sup>	3
Lambsquarters, common	3
Lettuce, miners	3
Morningglory,	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tail	3
Purslane, common	3
Rocket, London	3
Rocket, yellow	3
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup> **Raptor** controls non-ALS resistant kochia only.

<b>Grass Weeds Controlled by Raptor</b>	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
Maximum Weed Size (inches)	
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD®)	3
Darnel, Persian	3

**Grass Weeds Controlled by Raptor® Herbicide (Cont.)**

Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran® herbicide	
Maximum Weed Size (inches)	
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone-tolerant corn.

**Grass Weeds Suppressed by Raptor Applications**

Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
Maximum Weed Size (inches)	
Barnyardgrass	3
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3
Sedges,	
Purple	3
Yellow	3
Quackgrass	3

**DRY BEANS AND DRY PEAS**  
(Excluding English Peas, Lima Beans (Succulent) and Snap Beans)

**DIRECTIONS FOR USE**

**DO NOT APPLY RAPTOR TO DRY BEANS AND DRY PEAS IN CALIFORNIA.**

Raptor may be applied to the following dry beans and dry peas:

Dry Beans		Dry Peas
Adzuki	Navy	Dry edible peas (field peas)
Anazazi	Pink	
Black	Pinto	Southern peas (cow peas)
Black Turtle	Red kidney	
Cranberry	Small red	
Great Northern	Small white	
Lima (dry)		

**DO NOT apply Raptor to succulent peas, snap beans or fresh limas (except as specifically directed below).**

**DO NOT apply Raptor to chickpeas (garbanzo beans), or lentils.**

Reduced crop growth, temporary yellowing, quality, yield and/or delayed maturity may result from a Raptor application to dry beans and dry peas crops listed on this label. Since crop maturity may be delayed, timing of harvest may need to be adjusted accordingly. **DO NOT** apply Raptor if planting is delayed and chance of frost prior to maturity is likely. Some varieties of dry beans and dry peas are more sensitive to Raptor than other varieties. Growers should check with the seed company regarding the safety of Raptor to their variety.

**USE RAPTOR ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

Raptor is effective in controlling weeds in conservation tillage and conventional production systems. Apply Raptor postemergence to dry beans with at least one fully expanded trifoliate leaf and to dry peas with at least 3 pairs of leaves and before the bloom stage. Delay application until the majority of the weeds are at the recommended growth stage. Application timing should be based on weed size and crop growth stage. Apply Raptor to crop and weeds that are actively growing.

**THIS PRODUCT WHEN USED ON DRY BEANS AND DRY PEAS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.**

**USE RATE**

Apply 0.031 lb imazamox a.e./acre (4 fluid ounces of Raptor per acre). At this application rate, 1 gallon will treat 32 acres of dry beans and dry peas.

**NOTE: ADDITIONAL MIXING INSTRUCTIONS FOR DRY BEANS AND DRY PEAS.**

Raptor applications may be made to dry beans and dry peas either with or without the addition of a fertilizer. The addition of nitrogen-based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of dry bean response. When nitrogen and/or crop oils are added to the mixture, add Basagran® herbicide as a tank mixture partner at a rate of 6 to 16 oz/A to minimize crop response. For applications to dry peas, always add Basagran to the spray mixture, regardless of additives added. For enhanced grass activity, add a crop oil instead of surfactant. At 16 oz/A, Basagran will enhance control of common lamb-quarters and kochia. Basagran applications at

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rates higher than 16 oz./A may reduce grass control

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Only one application of **Raptor® herbicide** may be made during the season.

A maximum of 0.031 lb imazamox a.e./acre (4 ounces of **Raptor** per acre) per season may be applied to dry beans.

**Raptor applications must be made before dry beans and dry peas bloom.**

### WEEDS CONTROLLED

**Raptor** will control or suppress the weeds listed below when applied postemergence to 1- to 3-inch weeds (unless otherwise indicated) at the recommended rates listed below.

Broadleaf Weeds Controlled by Raptor		
	Application Rate	
	4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran® herbicide
	Maximum Weed Size (inches)	
Bedstraw		3
Beet, wild	3	3
Buttercup		3
Chickweed, common		3
Cocklebur, common		3
Flixweed	3	3
Jimsonweed	3	3
Lambsquarters, common <sup>1</sup>	3	3
Mustard,		
Tumble	3	3
Wild	3	3
Black	3	3
Nightshade,		
Black	3	3
Eastern black	3	3
Hairy	3	3
Pennycress, field	3	3
Pigweed,		
Redroot	3	3
Smooth	3	3
Spiny	3	3

Broadleaf Weeds Controlled by Raptor (Cont.)		
	Application Rate	
	4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran
	Maximum Weed Size (inches)	
Puncturevine		3
Radish, wild	3	3
Shepherdspurse	3	3
Tansymustard, green	3	3
Velvetleaf		3

<sup>1</sup> **Raptor** controls common lambsquarters at 4 oz/A east of the Rocky Mountains.

Broadleaf Weeds Suppressed by Raptor		
	Application Rate	
	4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran
	Maximum Weed Size (inches)	
Buckwheat, wild		3
Chickweed, common	3	
Knotweed, prostrate		3
Kochia <sup>1</sup>		3
Lettuce, miners		3
Morningglory,		
Entireleaf		3
Ivyleaf		3
Smallflower		3
Tall		3
Purslane, common		3
Rocket, London		3
Rocket, yellow		3
Smartweed,		
Ladysthumb		3
Pennsylvania		3
Spurge, prostrate		3

<sup>1</sup> **Raptor** controls non-ALS resistant kochia only.



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Grass Weeds Controlled by Raptor® Herbicide		
Application Rate		
	4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran® herbicide
	Maximum Weed Size (inches)	
Blackgrass		3
Brome,		
Downy	3	3
Cheat	3	3
Japanese	3	3
Canarygrass, littleseed		3
Cereals, volunteer		
Barley	3	3
Oat	3	3
Wheat (non-CLEARFIELD®)	3	3
Darnel, Persian	3	3
Foxtail,		
Giant	3	3
Green	3	3
Yellow	3	3
Jointed goatgrass	3	3
Oats, wild	3	3
Ryegrass, Italian		3
Shattercane	3	3
Volunteer corn <sup>1</sup>		2-8

<sup>1</sup> Except imidazolinone-tolerant corn.

Grass Weeds Suppressed by Raptor Applications		
Application Rate		
	4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran® herbicide
	Maximum Weed Size (inches)	
Barnyardgrass		3
Johnsongrass, rhizome		3
Crabgrass,		
Large	3	3
Smooth	3	3
Sedges,		
Purple	3	3
Yellow	3	3
Quackgrass	3	3

## ENGLISH PEAS

### DIRECTIONS FOR USE

For Postemergence Use on English Peas in Delaware, Illinois, Maryland, Minnesota, New York and Wisconsin Only.

Use Raptor® herbicide **ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

Reduced crop growth, temporary yellowing, quality, yield and/or delayed maturity may result from a Raptor application to English peas. Since crop maturity may be delayed, timing of harvest may need to be adjusted accordingly. **DO NOT** apply Raptor if planting is delayed and a chance of frost prior to maturity is likely. Growers should check with the seed company regarding the safety of Raptor to their variety.

THIS PRODUCT WHEN USED ON ENGLISH PEAS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

### USE RATE

**Early Postemergence Applications:** Apply Raptor at the broadcast rate of 0.023 lb imazamox a.e./acre (3 fluid ounces per acre). Application timing should be based on weed size and crop growth stage. Apply Raptor to crop and weeds that are actively growing.

Apply Raptor postemergence to English peas at least 3 inches in height but prior to 5 nodes before flowering. The use of trifluralin prior to a Raptor application may increase the likelihood and severity of crop injury.

A non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

The addition of a nitrogen-based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of English pea response.

When nitrogen-based fertilizer is added to the mixture, add Basagran as a tank mix partner at the rate of 6 to 16 ounces per acre to minimize crop response. Recommended nitrogen based fertilizers include liquid fertilizers (such as 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution.

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Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

For enhanced grass activity, add a crop oil concentrate at a rate of 1 gallon per 100 gallons per acre instead of a non-ionic surfactant. Always add **Basagran** at the rates indicated above when crop oil concentrate and/or a nitrogen based fertilizer are used in the spray mixture. **Basagran** applications at rates higher than 16 ounces per acre may reduce grass control.

**Raptor** may be applied a minimum of one hour before rainfall or overhead irrigation.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Only one application of **Raptor** may be made during the season.

A maximum of 0.023 lb imazamox a.e./acre (3 fluid ounces of **Raptor** per acre) per season may be applied to English peas.

Weeds Controlled by Raptor		
	Application Rate	
	Raptor at 3 oz/A	Raptor at 3 oz/A + Basagran at 6 - 16 oz/A
Maximum Weed Size (Inches)		
Nightshade,		
Black	3	3
Eastern black	3	3
Hairy	3	3
Mustard		
Tumble	3	3
Wild	3	3
Black	3	3
Pennycress, field	3	3
Pigweed,		
Redroot	3	3
Smooth	3	3
Spiny	3	3
Shepherdspurse	3	3

### LIMA BEANS (Succulent)

#### DIRECTIONS FOR USE

**For Postemergence Use in Lima Beans (succulent) in Delaware, Illinois, Maryland, Minnesota, Virginia and Wisconsin Only.**

**Use Raptor ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect manage-

ment and tillage practices that eliminate compaction and hardpans.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following **Raptor** applications in lima beans. These effects can be more pronounced if crops are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within days.

THIS PRODUCT WHEN USED ON LIMA BEANS (SUCCULENT) MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

#### USE RATE

**Early Postemergence Applications:** Apply **Raptor** at the broadcast rate of 0.031 lb imazamox a.e./acre (4 fluid ounces per acre), tank mixed with **Basagran** at 6 to 16 ounces per acre. When used in lima beans, **Raptor** must be applied with **Basagran** to minimize crop response. **Basagran** applications at rates higher than 16 ounces per acre may reduce grass control.

Application timing should be based on weed size and crop growth stage. Apply to crop and weeds that are actively growing. Apply **Raptor** + **Basagran** postemergence to lima beans in the first to second trifoliolate leaf stage and weeds that are less than 3 inches tall. Applications before the first trifoliolate leaf stage may result in increased crop response. **DO NOT** apply **Raptor** + **Basagran** to lima beans during flowering.

A non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

**Raptor** tank mixes with any pesticide other than **Basagran** are not recommended. Certain insecticide and herbicide tank mixes with **Raptor** in lima beans have shown unacceptable crop response.

**Raptor** may be applied a minimum of one hour before rainfall or overhead irrigation.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Only one application of **Raptor** may be made during the season.

A maximum of 0.031 lb imazamox a.e./acre (4 ounces of **Raptor** per acre) per season may be applied to lima beans (succulent) in Delaware, Illinois, Maryland, Minnesota, Virginia and Wisconsin only.

<b>Broadleaf Weeds Controlled by Raptor® Herbicide</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Jimsonweed	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

<b>Broadleaf Weeds Suppressed by Raptor</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz/A + Basagran at 6 - 16 oz/A</b>	
<b>Maximum Weed Size (inches)</b>	
Buckwheat, wild	3
Chickweed, common	3
Cocklebur, common	3
Lambsquarters, common	3
Knotweed, prostrate	3
Kochia <sup>1</sup>	3
Lettuce, miners	3
Morningglory	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3

<b>Broadleaf Weeds Suppressed by Raptor (Cont.)</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz/A + Basagran at 6 - 16 oz/A</b>	
<b>Maximum Weed Size (inches)</b>	
Smartweed	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup> Raptor controls non-ALS resistant kochia only.

<b>Grass Weeds Controlled by Raptor</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz/A + Basagran at 6 - 16 oz/A</b>	
<b>Maximum Weed Size (inches)</b>	
Barnyardgrass	3
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD <sup>®</sup> )	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone tolerant corn

<b>Grass Weeds Suppressed by Raptor</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz/A + Basagran at 6 - 16 oz/A</b>	
<b>Maximum Weed Size (inches)</b>	
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3

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Grass Weeds Suppressed by Raptor® Herbicide (Cont.)	
Application Rate	
Raptor at 4 oz/A + Basagran at 6 - 16 oz/A	
Maximum Weed Size (inches)	
Sedges	
Purple	3
Yellow	3
Quackgrass	3

## SNAP BEANS

### DIRECTIONS FOR USE

Raptor may be applied to snap beans in the States of Delaware, Idaho, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, New York, Oregon, Pennsylvania, Virginia, Washington and Wisconsin only.

Occasionally, internode shortening and/or temporary yellowing of snap beans may occur following Raptor application. These effects can be more pronounced if snap beans are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within days.

Use Raptor® herbicide ONLY if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans. DO NOT apply to snap beans that have been injured from applications of soil-applied herbicides.

Apply Raptor postemergence to snap beans with at least one fully expanded trifoliolate and before the bloom stage. For use in Idaho, Oregon and Washington, apply Raptor to snap beans at first or second trifoliolate leaf stage. Delay application until the majority of the weeds are at the recommended growth stage. Application timing should be based on weed size and crop growth stage. Apply Raptor to crop and weeds that are actively growing. DO NOT apply Raptor to snap beans during flowering.

THIS PRODUCT WHEN USED ON SNAP BEANS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

### USE RATE

Apply Raptor at the broadcast rate of 0.031 lb imazamox a.e./acre (4 ounces Raptor per acre), tank mixed with Basagran® herbicide at 6 to 16 ounces per acre. When used in snap beans,

Raptor must be applied with Basagran to minimize crop response. Basagran applications at rates higher than 16 ounces per acre may reduce grass control.

### NOTE: ADDITIONAL MIXING INSTRUCTIONS FOR SNAP BEANS.

For use in Delaware, Idaho, Indiana, Illinois, Maryland, Michigan, Minnesota, New York, Oregon, Pennsylvania, Virginia, Washington and Wisconsin, a non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

For use in Idaho, Oregon and Washington, a non-ionic surfactant and nitrogen fertilizer must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution. Alternatively, a crop oil concentrate (COC) or methylated seed oil (MSO) can be used. Use COC at a rate of 1 gallon per 100 gallons of spray solution. Use MSO at a rate of 1 - 2 gallons per 100 gallons of spray solution. Recommended nitrogen based fertilizers include liquid fertilizers such as 28-0-0, 32-0-0, or 10-34-0 at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12 - 15 pounds per 100 gallons of spray solution.

Raptor tank mixes with any pesticide other than Basagran are not recommended. Certain insecticide and herbicide tank mixes with Raptor in snap beans have shown unacceptable crop response.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Only one application of Raptor may be made during the season.

A maximum of 0.031 lb imazamox a.e./acre (4 ounces of Raptor per acre) per season may be applied to snap beans.

Raptor applications must be made before snap bean bloom.

### WEEDS CONTROLLED

Raptor will control or suppress the weeds listed below when applied postemergence to 1 to 3 inch weeds (unless otherwise indicated) at the recommended rates listed below.

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<b>Broadleaf Weeds Controlled by Raptor® Herbicide</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran® herbicide at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Jimsonweed	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

<b>Broadleaf Weeds Suppressed by Raptor</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Buckwheat, wild	3
Chickweed, common	3
Cocklebur, common	3
Lambsquarters, common	3
Knotweed, prostrate	3
Kochia <sup>1</sup>	3
Lettuce, miners	3
Morningglory,	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3

<b>Broadleaf Weeds Suppressed by Raptor (Cont.)</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup> Raptor control non-ALS resistant kochia only.

<b>Grass Weeds Controlled by Raptor</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Barnyardgrass	3
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD <sup>®</sup> )	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone tolerant corn.

<b>Grass Weeds Suppressed by Raptor</b>	
<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3

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Grass Weeds Suppressed by Raptor® Herbicide (Cont.)	
Application Rate	
Raptor at 4 oz/A + Basagran at 6 - 16 oz/A	
Maximum Weed Size (inches)	
Sedges,	
Purple	3
Yellow	3
Quackgrass	3

**SOYBEANS**

**DIRECTIONS FOR USE**

Raptor is effective in controlling weeds in conservation tillage and conventional production systems. Raptor can be applied early postemergence in soybeans but before the bloom stage. Refer to the specific treatment under the **APPLICATION INFORMATION** section of the label.

Unusually cool temperatures (50° F or less) reduce photosynthesis and transpiration and thus reduce uptake, translocation, and efficacy of Raptor® herbicide in weeds. Delaying a Raptor application for 48 hours from the time the temperature increases to above 50° F, if air temperature has been below 50° F for 10 or more hours, will improve weed control and reduce crop response.

**NO-TILL/MINIMUM TILLAGE AND DOUBLE CROP SOYBEANS**

Raptor controls existing weeds and provides residual activity on some weeds when applied early postemergence to soybeans in no-till or minimum tillage and double crop soybean production systems. The application must be applied after emergence of the crop. (Refer to the **WEEDS CONTROLLED** chart for weeds controlled and recommended weed size).

To ensure thorough coverage, use a minimum of 20 gallons of water per acre in no-till or minimum tillage systems. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Prior to planting or emergence of soybeans, Touchdown® herbicide or Roundup Ultra® herbicide or any glyphosate-containing product registered for that use may be applied to control emerged weeds. See specific product labeling for rates, recommendations, precautions and restrictions.

**USE RATES**

**APPLY 0.031 LB IMAZAMOX A.E./ACRE (4 FLUID OUNCES OF RAPTOR® HERBICIDE PER ACRE)**

**WHEN PRECEDED BY A FULL RATE OF A REGISTERED SOIL-APPLIED GRASS HERBICIDE LIKE PROWL® 3.3 EC HERBICIDE**

**OR**

**APPLY 0.040 LB IMAZAMOX A.E./ACRE (5 FLUID OUNCES OF RAPTOR PER ACRE) IN A TOTAL POSTEMERGENCE HERBICIDE PROGRAM.**

Raptor may be applied postemergence at a broadcast rate of 4 fluid ounces per acre when it is preceded with a full labeled rate of a soil-applied grass herbicide such as Prowl 3.3 EC. At this rate one gallon of Raptor will treat 32 acres of soybeans. Raptor may be applied postemergence at a broadcast rate of 5 fluid ounces per acre (including minimum and no-till). At this broadcast rate, one gallon of Raptor will treat 25.6 acres of soybeans.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

Raptor applications must be made before soybean bloom.

Only one application of Raptor may be made during the season. Do not apply more than 0.04 lb a.e. imazamox (5 oz Raptor) per acre per season.

If soybeans are furrow irrigated, till the soil prior to planting winter wheat or barley. The beds should be broken up and the soil mixed with tillage equipment set to cut 4-6 inches deep.

**WEEDS CONTROLLED**

When applied as directed, Raptor will control or suppress the weeds listed below as indicated. Refer to the **MIXING INSTRUCTIONS** section for recommendations when weeds are at the maximum recommended growth stage, or are under stress.

**Broadleaf Weeds Controlled by Raptor Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
Weed Size (inches)		
Artichoke, Jerusalem	3-8	3-8
Carpetweed		2-4
Chickweed, common	2-5	2-5
Cocklebur, common	2-8	2-8
Jimsonweed	2-6	2-6
Kochia <sup>2</sup>	1-4	1-4
Lambsquarters, common	2-5	2-5
Marshelder	2-4	2-4

**Broadleaf Weeds Controlled by Raptor® Herbicide Alone or in a Sequential<sup>1</sup> Program (Cont.)**

	Application Rate	
	Raptor Postemergence Alone	Prowl® 3.3 EC Herbicide Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
	Weed Size (Inches)	
Mallow, Venice	1-4	
Morningglory,		
Entireleaf	2-4	
Ivyleaf	2-4	
Smallflower	2-4	
Tall	2-4	
Mustard spp.	2-8	2-8
Nightshade,		
Black	2-5	2-5
Eastern black	2-5	2-5
Hairy	2-5	2-5
Pigweed,		
Palmer amaranth <sup>3</sup>	2-4	2-4
Prostrate	2-5	2-5
Redroot	2-8	2-8
Smooth	2-8	2-8
Spiny	2-5	2-5
Puncturevine	1-3	
Purslane, common	1-3	1-3
Pusley, Florida	2-4	
Radish, wild	2-4	2-4
Ragweed,		
Giant <sup>3</sup>	2-5	2-5
Common <sup>3</sup>	2-5	
Smartweed,		
Ladysthumb	2-5	2-5
Pennsylvania	2-5	2-5
Spurge, annual	2-4	
Sunflower	2-8	2-8
Velvetleaf	2-8	2-8

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> Control of light to moderate populations only. For control of heavier populations use a SEQUENTIAL APPLICATION with a soil-applied grass herbicide as described above.

<sup>3</sup> Control of light to moderate populations of ALS-susceptible biotypes only. For control of heavier populations of ALS-tolerant biotypes see the **HERBICIDE COMBINATION** section.

**Broadleaf Weeds Suppressed by Raptor® Herbicide Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl® 3.3 EC Herbicide Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
	Weed Size (Inches)	
Bindweed,		
Field (seedling)	2-4	2-4
Hedge (seedling)	2-4	2-4
Buckwheat, wild	1-3	1-3
Mallow, Venice <sup>2</sup>	1-4	
Morningglory,		
Entireleaf <sup>2</sup>	2-4	
Ivyleaf <sup>2</sup>	2-4	
Pitted	2-4	2-4
Smallflower <sup>2</sup>	2-4	
Tall <sup>2</sup>	2-4	
Ragweed, common <sup>2</sup>	2-5	
Sida, prickly	2-4	2-4
Sowthistle, annual	2-4	2-4
Thistle, Canada	2-5	2-5

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> For control see the 5-ounce rate and **HERBICIDE COMBINATIONS** section.

**Grass Weeds Controlled by Raptor Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
	Weed Size (Inches)	
Barley, wild	2-4	2-4
Barnyardgrass	2-5 <sup>2</sup>	2-5
Crabgrass,		
large	2-4	
smooth	2-4	
Crowfoot grass	2-5	
Cupgrass, woolly	2-4	
Foxtail,		
Giant	2-6	2-6
Green	2-6	2-6
Yellow	2-6	2-6
Goosegrass	2-5	

**Grass Weeds Controlled by Raptor® Herbicide Alone or in a Sequential<sup>1</sup> Program (Cont.)**

	Application Rate	
	Raptor Postemergence Alone	Prowl® 3.3 EC Herbicide Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
Weed Size (inches)		
Johnsongrass,		
Seedling	4-8	4-8
Millet, wild proso	2-4 <sup>2</sup>	2-4
Oats, wild	2-6	2-6
Panicum,		
Fall	2-6	2-6
Texas		2-6
Sandbur, field <sup>3</sup>		2-5
Shattercane	2-8	2-8
Signalgrass, broadleaf	2-5 <sup>2</sup>	2-5
Volunteer corn <sup>4</sup>	2-8	2-8
Volunteer wheat (non-CLEARFIELD*)	2-4 <sup>3</sup>	2-4
Witchgrass		2-5

- <sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a post-emergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.
- <sup>2</sup> Control of light to moderate populations only. For control of heavier populations use a SEQUENTIAL APPLICATION with a soil-applied grass herbicide as described above.
- <sup>3</sup> For control, a dinitroaniline (DNA) herbicide such as **Prowl 3.3 EC** must be soil-applied at a full-labeled rate.
- <sup>4</sup> Except imidazolinone-tolerant corn.

**Grass Weeds Suppressed by Raptor Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
Weed Size (inches)		
Crabgrass,		
Large	2-4	
Smooth	2-4	
Cupgrass, woolly	2-4	
Goosegrass	2-4	
Itchgrass		2-5
Johnsongrass, rhizome	6-12	6-12
Quackgrass		4-8
Red rice		2-5
Stinkgrass	2-4	

**Grass Weeds Suppressed by Raptor Alone or in a Sequential<sup>1</sup> Program (Cont.)**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
Weed Size (inches)		
SEDGES		
Nutsedge,		
Purple	1-3	1-3
Yellow	1-3	1-3

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

**HERBICIDE COMBINATIONS**

**GRASS WEEDS**

Use a soil-applied grass herbicide (such as **Prowl 3.3 EC**) if heavy infestations of some grass weeds exist or if **Raptor** does not control the species present. Refer to the **Prowl 3.3 EC** (or other grass herbicide) label for specific use recommendations, rates and precautions.

Roundup Ultra® may be tank-mixed with **Raptor** to aid in control of certain grasses only in Roundup Ready® Soybeans. Other glyphosate containing products registered for use on Roundup Ready soybeans may be substituted for Roundup Ultra. See the Roundup Ultra label (or other product labels) for rates and weeds controlled. **DO NOT** tankmix **Raptor** with **Extreme®** or **Backdraft®** herbicides. If a selective postemergence grass herbicide such as **Poast Plus®** herbicide is mixed with **Raptor** to control species that are not controlled with **Raptor** alone, include a methylated seed oil, or a crop oil concentrate (1-2 gallons per 100 gallons) AND liquid fertilizer (2.5 gallons per 100 gallons) should be added to the tank-mixture. In some cases the activity of the grass herbicide may be reduced when mixed with **Raptor**. The reduction in activity may be overcome by delaying the application of the postemergence grass herbicide 7 days following the application of **Raptor**. If the post-emergence grass herbicide is applied first, wait 3 days before applying **Raptor**. Refer to the respective grass herbicide label for recommended application rate, weed size and restrictions.

**BROADLEAF WEEDS**

Roundup Ultra® herbicide may be tank-mixed with **Raptor** to aid in control of certain broadleaf weeds only in Roundup Ready® Soybeans. See the Roundup Ultra label for rates and weeds controlled.



Tank-mixing **Raptor® herbicide** and certain broadleaf herbicides (e.g. diphenylethers and **Basagran® herbicide**) can reduce grass control, therefore a sequential program including a soil-applied grass herbicide such as **Prowl 3.3 EC** is recommended for optimal control.

**ENHANCED CONTROL OF RAGWEED SPECIES, PALMER AMARANTH, WATERHEMP AND KOCHIA**

Use a soil application of **Prowl 3.3 EC** followed by a postemergence application of **Raptor** at a broadcast rate of 4 to 5 fluid ounces per acre plus a diphenylether such as Ultra Blazer™ herbicide (acifluorfen) or Roundup Ultra for enhanced control of ragweeds, Palmer amaranth, waterhemp, and kochia. Refer to the **Prowl 3.3 EC** and Ultra Blazer or Roundup® Ultra labels for specific use recommendations, rates, restrictions and precautions.

When tank-mixing **Raptor** and Ultra Blazer, apply **Raptor** at a broadcast rate of 5 fluid ounces per acre or 4 fluid ounces per acre when preceded by a full rate of a registered soil-applied grass herbi-

cide. Apply Ultra Blazer at the following rates depending on weed height:

**Ultra Blazer Rate (ounces per acre)<sup>1</sup>**

Weed	8-10 oz	12-14 oz	16-20 oz
Ragweed spp.	2-4"	4-6"	6-8"
Palmer amaranth	2-4"	4-6"	6-8"
Waterhemp spp.	2-4"	4-6"	6-8"
Kochia	2-4"	4-6"	6-8"

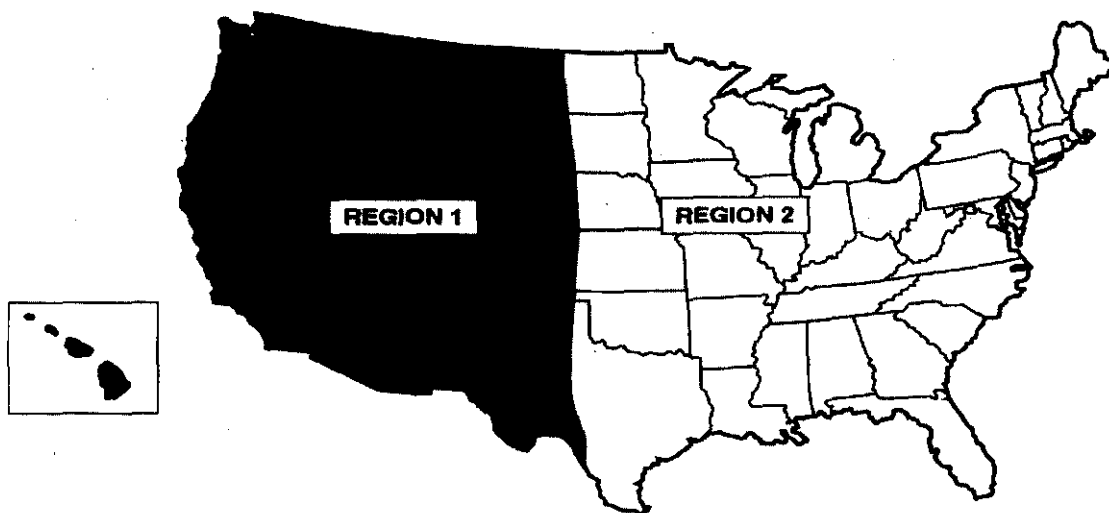
<sup>1</sup> Use the higher rate if common ragweed is present or the weed population is high.

**ENHANCED CONTROL OF RAGWEED AND GIANT RAGWEED**

Firstrate® herbicide may be tank-mixed with **Raptor** to aid in the control of common ragweed and giant ragweed. When tank-mixing Firstrate with **Raptor**, apply 0.15 to 0.3 ounces per acre of Firstrate. Use the higher rate when weeds approach maximum labeled size. See the Firstrate label for recommended rates and precautions.

**ROTATIONAL CROP RESTRICTIONS**

Rotational crops may be planted after applying the recommended rate of **Raptor** in the regions as indicated below.



**Region 1** consists of states and parts of states WEST of U.S. Highway 83 (Arizona, California, Hawaii, Idaho, Oregon, Washington, Utah, Nevada, New Mexico, Wyoming, Montana, Colorado, and western parts of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Texas).

**Region 2** consists of states and parts of states to the EAST of U.S. Highway 83 (Includes the eastern parts of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, and the states to the east of these states).

**Rotational Interval (months) Following an Application of Raptor® herbicide**

<b>PLANT-BACK INTERVAL (MONTHS)</b>	<b>REGION 1</b>	<b>REGION 2</b>
<b>ANYTIME</b>	<b>CLEARFIELD*</b> canola <b>CLEARFIELD*</b> wheat <b>CLEARFIELD*</b> sunflower Dry beans and dry peas soybeans	<b>CLEARFIELD*</b> canola <b>CLEARFIELD*</b> wheat <b>CLEARFIELD*</b> sunflower Dry beans and dry peas soybeans
<b>THREE MONTHS</b>	Alfalfa Wheat (non- <b>CLEARFIELD*</b> )	Alfalfa Wheat (non- <b>CLEARFIELD*</b> )
<b>FOUR MONTHS</b>	Rye	Barley Rye
<b>EIGHT AND ONE-HALF MONTHS</b>	Corn (field, pop, seed, sweet, <b>CLEARFIELD*</b> and non- <b>CLEARFIELD*</b> )	Corn (field, pop, seed, sweet, <b>CLEARFIELD*</b> and non- <b>CLEARFIELD*</b> )
<b>NINE MONTHS</b>	Barley <sup>1</sup> Cantaloupe Cotton Grain Sorghum Lettuce Millets Oat Onion	Peanut Pumpkin Rice Squash Sunflower Tobacco Watermelon
		Broccoli Cabbage Cantaloupe Carrot Cotton Cucumber Grain Sorghum Lettuce Millets Oat Onion
		Peanut Pepper Potato <sup>2</sup> Pumpkin Rice Squash Sunflower Tobacco Tomato Turnip Watermelon
<b>EIGHTEEN MONTHS</b>	Barley <sup>1</sup> Broccoli Cabbage Carrot Cucumber <b>All other crops not listed in the ROTATIONAL CROP restrictions.</b>	Pepper Potato Tomato Turnip
		Canola Sugar beet <sup>3</sup> Table beet <sup>3</sup> <b>All other crops not listed in the ROTATIONAL CROPS restrictions.</b>
		Condiment Mustard
<b>TWENTY-SIX MONTHS</b>	Sugar beet <sup>4</sup> Condiment Mustard	Canola Table beet
		Sugar beet <sup>3</sup> Table beet <sup>3</sup>

<sup>1</sup> In **Region 1**, refer to the following table for rotational intervals for planting barley following applications of **Raptor**.

<sup>2</sup> In **Region 2**, refer to the following table for rotational intervals for planting potato following applications of **Raptor**.

<sup>3</sup> In **Region 2**, sugar beet and table beets can be planted eighteen months following an application of **Raptor** if the soil pH is uniformly 6.2 or greater. If the soil pH is less than 6.2, the rotational interval is 26 months. Sugar beet yields can be reduced when grown in soil conditions with a pH less than 6.2. If the soil is limed to adjust the soil pH, apply the lime at least 18 months prior to planting sugarbeet or other rotational crops under the 18 month rotational interval.

<sup>4</sup> For sugar beets grown in parts of Nebraska west of Highway 83 and Platte, Goshen and Laramie counties in Wyoming, follow the sugar beet rotational crop restrictions for **Region 2** for sprinkler irrigated fields only. If fields are dryland, flood or furrow irrigated, follow restrictions for **Region 1**. A minimum of 10 inches of overhead irrigation must be applied each season in order to qualify for **Region 2** guidelines.

When taking soil samples to determine soil pH, utilize a grid sampling technique, sampling to a depth of 3-4 inches.

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Barley Rotational Interval Based on pH, Moisture and Tillage (Region 1)		Moldboard plowing?	
		NO	YES
pH and Rainfall Requirements	>18" R+I AND pH >6.2	9 months	9 months
	<18" R+I OR pH <6.2	18 months	9 months

Potato Rotational Interval Based on pH and Moisture (Region 2)		
pH and Rainfall Requirements	>18" R+I AND pH >6.2	9 months
	<18" R+I OR pH <6.2	18 months

**R+I** = Rainfall and overhead irrigation from the time of **Raptor® herbicide** application to barley or potato planting. **Does not include furrow or flood irrigation.**

If the rainfall or pH requirements are not fully met, and barley is planted prior to 18 months, injury may be reduced by tillage, such as deep disking (greater than 6 inches deep) after crop harvest but prior to November 1.

**FURROW- AND FLOOD-IRRIGATED CROPS**

Following harvest of furrow- or flood-irrigated crops, the soil should be thoroughly mixed by plowing or deep disking in order to minimize the potential for herbicide carryover to the following crop.

Use of **Raptor** in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors, such as arid conditions, make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

GENERAL PRECAUTIONS
<p>In the event of a crop loss due to weather, dry beans, dry peas, <b>CLEARFIELD®</b> canola, <b>CLEARFIELD®</b> corn, <b>CLEARFIELD®</b> sunflowers, <b>CLEARFIELD®</b> wheat, or soybeans can be replanted. <b>DO NOT</b> make an additional application of <b>Raptor</b>.</p> <p>Application of products containing chlorimuron ethyl (Classic®, Canopy®, Synchrony®, Gemini®, Lorox Plus®, Preview® herbicides, etc.), metsulfuron-methyl (Harmony® Extra), flumetsulam (Broadstrike® + Dual®, Broadstrike + Treflan® herbicides), imazaquin (<b>Scepter®, Squadron®, Tri-Scept®, Scepter O.T., Scepter 70 DG herbicides</b>) or imazethapyr (<b>Pursuit®, Pursuit DG, Pursuit Plus EC herbicides</b>) the same year as <b>Raptor</b> may increase the risk of injury to sensitive rotational crops. Consult all pertinent labels for recommended uses of these products in combinations.</p> <p>If arid conditions occur during the year of application, rotational crop injury may occur.</p>

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**DISCLAIMER**

The label instructions for the use of this product reflect the opinion of experts based on research and field use. 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, herbicide resistant weed populations, or the use of, or application of the product contrary to label instructions, all of which are beyond the control of BASF Corporation. All such risks shall be assumed by the user.

BASF MAKES THIS PRODUCT AVAILABLE TO THE USER AND/OR GROWER SOLELY TO THE EXTENT THAT THE BENEFIT AND UTILITY, IN THE SOLE OPINION OF THE USER AND/OR GROWER, OUTWEIGH THE EXTENT OF POTENTIAL INJURY ASSOCIATED WITH THE USE OF THIS PRODUCT. THE DECISION TO USE OR NOT TO USE THIS HERBICIDE MUST BE MADE BY EACH INDIVIDUAL **RAPTOR® HERBICIDE** USER AND/OR GROWER ON THE BASIS OF POSSIBLE CROP INJURY FROM **RAPTOR**, THE SEVERITY OF WEED INFESTATION, THE COST OF ALTERNATIVE WEED CONTROLS, AND OTHER FACTORS. BASF INTENDS THAT BECAUSE OF THE RISK OF FAILURE TO PERFORM OR CROP DAMAGE THAT ALL SUCH USE IS AT THE USER'S AND/OR GROWER'S RISK. BASF DISCLAIMS ANY LIABILITY FOR CLAIMS, CAUSES OF ACTION, FINES, PENALTIES, DAMAGES, INCLUDING CONSEQUENTIAL INCIDENTS AND DAMAGES, LOSSES, LIABILITIES, JUDGEMENTS, AND EXPENSES ARISING OUT OF OR RELATING TO INJURY TO PERSONS, CROPS, OR PROPERTY RESULTING FROM THE USE OF **RAPTOR** ON DRY BEANS AND DRY PEAS CONTRARY TO THE LABEL INSTRUCTIONS.

BASF shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

BASF warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the **DIRECTIONS FOR USE**, subject to the risks referred to above. **BASF DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF RAPTOR.** In no case shall BASF or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

**USES WITH OTHER PRODUCTS (TANK MIXES)**

If this product is used in combination with any other product except as specifically recommended in writing by BASF, then BASF shall have no liability for any loss, damage or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by BASF, the liability of BASF shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF product in such combination use, and in any event shall be limited to return of the amount of the purchase price of the BASF product.

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Supersedes NVA 2004-04-133-0015

BASF Corporation

Agricultural Products

26 Davis Drive

Research Triangle Park, NC 27709



The Chemical Company

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The Chemical Company

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

NOV 19 2004

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

241-379

# Raptor<sup>®</sup>

herbicide

**FOR USE ON ALFALFA, BEANS (DRY), CHICORY, CLOVER GROWN FOR SEED,  
LIMA BEANS (SUCCULENT), PEAS (DRY), PEAS (ENGLISH), SNAP BEANS AND  
SOYBEANS**

**Active Ingredient:**

Ammonium salt of imazamox 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H  
imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid\* ..... 12.1%

**Inert Ingredients:** ..... 87.9%

**Total:** ..... 100.0%

\* Equivalent to 11.4% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-  
5-(methoxymethyl)-3-pyridinecarboxylic acid  
(1 gallon contains 1.0 pound of active ingredient as the free acid)

**U.S. Patent No. 5,334,576**

**EPA Reg. No. 241-379**

**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.)

**In case of an emergency endangering life or property involving this product,  
call (800) 832-HELP (4357).**

**See Next Page for Additional Precautionary Statements**

See inside booklet for complete **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

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<b>FIRST AID</b>	
<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>
<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 first 5 minutes, then continue rinsing eye.</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 mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION!**

Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

**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-resistant 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, or neoprene rubber ≥14 mils, or nitrile rubber ≥14 mils.
- Shoes plus socks.

Follow 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.

<b>User Safety Recommendations</b>
<p><b>Users should:</b></p> <ul style="list-style-type: none"> <li>• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.</li> <li>• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li> </ul>

**ENVIRONMENTAL HAZARDS**

This pesticide may be hazardous to plants outside the treated area. **DO NOT** apply directly to water,

or to areas where surface water is present, or to intertidal areas below the mean high water mark. Offsite movement from spray drift, volatilization, and runoff may be hazardous to neighboring crops and vegetative habitat utilized for food and cover by wildlife and aquatic organisms. **DO NOT** contaminate water when disposing of equipment washwaters.

**IN CASE OF EMERGENCY:**

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

CHEMTREC (800) 424-9300

BASF Corporation (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 (800) 832-HELP (4357).

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of pesticide application.

**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.



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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 **4 hours**. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, or neoprene rubber ≥14 mils, or nitrile rubber ≥14 mils.
- shoes plus socks.

Ensure spray drift to non-target species does not occur.

**DO NOT** apply **Raptor® herbicide** in any manner not specifically described in this label.

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

When applied by either ground or air, **Raptor** spray drift or other indirect contact may injure sensitive crops, including non-imidazolinone tolerant wheat, sunflower or canola, sugarbeets, and leafy vegetables.

Spray equipment used for **Raptor** application must be drained and thoroughly cleaned with water before being used to apply other products.

Observe all cautions and limitations on this label and on the labels of products used in combination with **Raptor**. **DO NOT** use **Raptor** other than in accordance with the instructions set forth on this label. Keep containers closed to avoid spills and contamination.

### STORAGE AND DISPOSAL

#### PROHIBITIONS:

- KEEP FROM FREEZING.
- **DO NOT** store below 32° F.
- **DO NOT** contaminate water, food or feed by storage or disposal.

**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:** 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.

### I. GENERAL INFORMATION

The mode of weed killing activity involves uptake of **Raptor** by foliage and/or weed roots and rapid translocation to the growing points. After **Raptor** application, susceptible weeds may show yellowing and weed growth will stop. Susceptible weeds stop growing and either die or are not competitive with the crop. Adequate soil moisture is important for optimum **Raptor** activity. When adequate soil moisture is present, **Raptor** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil. A timely cultivation after a **Raptor** application may improve general weed control.

When organophosphate (such as Lorsban® insecticide) or carbamate insecticides (such as Furadan™ insecticide) are tank-mixed with **Raptor**, temporary injury may result to the treated crop. Separate organophosphate and **Raptor** application by at least 7 days to reduce potential for injury.

Use of **Raptor** is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following **Raptor** applications. These effects can be more pronounced if crops are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within 1-2 weeks.

**Replanting:** If replanting is necessary in a field previously treated with **Raptor**, the field may be replanted to beans (dry), **CLEARFIELD®** Canola, **CLEARFIELD®** Corn, **CLEARFIELD®** Sunflowers, **CLEARFIELD®** Wheat, peas (English), peas (dry),

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lima beans (succulent), snap beans or soybeans. Rework the soil no deeper than 2 inches. **DO NOT** apply a second treatment of **Raptor® herbicide**. **DO NOT** apply **Pursuit® herbicide**, **Raptor**, or **Pursuit Plus EC herbicide** if soybeans are replanted.

Naturally occurring biotypes<sup>1</sup> of some of the weeds listed on this label may not be effectively controlled by this and/or other products with either the ALS/AHAS enzyme inhibiting mode of action. Other herbicides with the ALS/AHAS enzyme inhibiting mode of action include the sulfonylureas (e.g., Amber®, Express®, Everest®, Finesse®, Glean®, Peak®, Rave™, Accent®, Ally®, Basis®, Classic®, Exceed®, Harmony® Extra, Maverick®, Permit®, Pinnacle®, Silverado® herbicides, etc.), imidazolinones (e.g., Pursuit, Scepter®, Cadre® and Lightning® herbicides), the sulfonamides (e.g., Hornet® herbicide, etc.) and the pyrimidyl benzoates (e.g., Staple® herbicide, etc.). If naturally occurring ALS/AHAS resistant biotypes are present in a field, **Raptor** and/or any other ALS/AHAS enzyme inhibiting mode of action herbicide should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

<sup>1</sup> A weed biotype is a naturally occurring plant within a given species that has a slightly different, but distinct, genetic makeup from other plants.

**Raptor** is very active against many broadleaf and grass weed species. For long term weed management, use two herbicides with different modes of action to reduce the potential for weed resistance. Crop (and herbicide) rotation is also effective in managing weed resistance where herbicides of different modes of action are used. Tillage, where practical (such as in fallow production, or prior to planting) is also effective in controlling weeds to minimize resistance development. Additionally, a burndown herbicide during fallow or prior to planting is also effective in reducing weed resistance development.

**Raptor** has no preharvest interval (PHI) for any crop.

## II. MIXING INSTRUCTIONS

POSTEMERGENCE APPLICATIONS OF **RAPTOR** REQUIRE THE ADDITION OF AN ADJUVANT **AND** A NITROGEN FERTILIZER SOLUTION.

### I. ADJUVANTS

**CROP OIL CONCENTRATE:** A petroleum or vegetable seed based crop oil concentrate may be used. A methylated seed oil is recommended when weeds are under moisture or temperature stress. Use methylated seed oils or crop oil concentrate at a rate of 1-2 gallons per 100 gallons of spray solution.

**OR**

**SURFACTANTS:** Use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 1 quart per 100 gallons of spray solution (0.25%vol/vol). An organo-silicone surfactant may be used in place of a non-ionic surfactant.

**AND**

### II. NITROGEN FERTILIZER

Recommended nitrogen based fertilizers include liquid fertilizers (such as liquid ammonium sulfate, 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

When weeds are under moisture or temperature stress, using higher nitrogen fertilizer rates (UAN at 5% v/v or 20 lbs AMS/100 gallons) may improve weed control. Additional crop response may be observed when higher fertilizer rates are used.

### DO NOT USE CROP OIL CONCENTRATE OR METHYLATED SEED OIL WITH RAPTOR IN CHICORY.

Fill the spray tank one-half to three-quarters full with clean water. Use a calibrated measuring device to measure the required amount of **Raptor**. Add **Raptor** to the spray tank while agitating. Add adjuvants and fill the remainder of the tank with water.

**NOTE:** Nitrogen fertilizer is not required when applied in use areas south of Interstate Highway 40, except in the states of Texas, New Mexico, Oklahoma, Arizona, and California.

**NOTE:** Do not apply **Raptor** in liquid fertilizer as the carrier.

### NOTE: Additional MIXING INSTRUCTIONS for DRY BEANS AND DRY PEAS (Excluding English Peas, Lima Beans (succulent) and Snap Beans).

**Raptor** applications may be made to dry beans and dry peas either with, or without the addition of a fertilizer. The addition of nitrogen-based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of dry beans and dry peas response. When nitrogen is added to the mixture, add **Basagran® herbicide** as a tank mixture partner at a rate of 6 to 16 oz/A to minimize crop response. For applications to dry peas, always add **Basagran** to the spray mixture. For enhanced grass activity, add a crop oil or methylated seed oil instead of surfactant. Always add **Basagran** at the rates indicated above when crop oils and/or fertilizer are used in the spray mixture. **Basagran** applications at rates higher than 16 oz/A may reduce grass control.

**NOTE: See DIRECTIONS FOR USE for ENGLISH PEAS, LIMA BEANS (Succulent) and SNAP BEANS in Section IV. APPLICATION INSTRUCTIONS, for additional mixing instructions.**

**TANK MIX COMBINATIONS WITH OTHER HERBICIDES**

If other herbicides or other spray tank components are tank-mixed with **Raptor® herbicide**, while agitating, add components in the following order and thoroughly mix after adding each component:

- 1) Fill spray tank 1/2 to 3/4 full with clean water.
- 2) Add soluble packet products and thoroughly mix.
- 3) Add WP (wetable powder), DG (dispersible granule), DF (dry flowable) or liquid flowable formulations not in soluble packets.
- 4) Add **Raptor** and thoroughly mix.
- 5) Add other aqueous solution products.
- 6) Add EC (emulsifiable concentrate) products.
- 7) Add surfactant or crop oil to the spray tank.
- 8) Add nitrogen fertilizer solution.
- 9) While agitating, fill the remainder of the tank with water.

To avoid injury to sensitive crops, spray equipment used for **Raptor** applications must be drained and thoroughly cleaned with water before being used to apply other products.

When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded. **Raptor** cannot be mixed with any product containing a label prohibiting such mixtures.

**III. SPRAYING INSTRUCTIONS**

**DO NOT** apply when wind conditions may result in drift, when temperature inversion conditions exist, or when spray may be carried to sensitive crops. Sensitive crops include but are not limited to leafy vegetables and sugarbeet.

**GROUND APPLICATION**

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. A spray pressure of 20 to 40 psi is recommended.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying **Raptor** to minimum or no-till crops. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Adjust the boom height to ensure proper coverage of weed foliage (according to the manufacturer's recommendation). Use flat-fan nozzle tips or simi-

lar appropriate nozzle tips to ensure adequate coverage.

Avoid overlaps when spraying.

**GROUND APPLICATION WITH A LOW-VOLUME SPRAYER**

**Raptor** may be applied with a low-volume (Spray-Coupe®-type) sprayer. When applying **Raptor** with a low-volume sprayer, spray the weeds before they reach the maximum size listed in this label.

Adequate control of weeds is dependent upon good spray coverage of the weeds. The sprayer must be calibrated to deliver the recommended spray volume and pressure to ensure adequate spray coverage of the weeds.

When applying **Raptor** with a low-volume sprayer, apply a minimum of 10 gallons per acre of spray solution with a nozzle pressure between 40-60 psi for optimum coverage.

**AERIAL APPLICATION**

**Raptor** may be applied by air to all crops listed on this label.

Uniformly apply with properly calibrated equipment in 5 or more gallons of water per acre. The addition of an adjuvant AND fertilizer solution are required for optimum weed control.

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.

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 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.

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

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## 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.

### 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 2-10 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 non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Applicator is responsible for any loss or damage which results from spraying **Raptor® herbicide** in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

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## IV. APPLICATION INFORMATION

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**Apply Raptor as a postemergence treatment when weeds are actively growing and before they exceed the maximum recommended size (see weed control tables following each crop).** Delay application until the majority of the weeds are at the recommended growth stage. In general, **Raptor** should be applied when weeds are small and actively growing, however, delay application in seedling alfalfa and dry beans until minimum growth stages have occurred (refer to seedling alfalfa and dry bean sections).

An adjuvant (either a surfactant or a crop oil concentrate) and a nitrogen fertilizer must be added to the spray solution for optimum weed control activi-

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ty. See the **ADJUVANT** section under **MIXING INSTRUCTIONS** for specific instructions.

When **Raptor® herbicide** is applied postemergence, absorption will occur through both the roots and foliage. Susceptible weeds stop growing and either die or are not competitive with the crop. **Raptor** not only controls many existing broadleaf and grass weeds when applied postemergence, it also provides activity on susceptible weeds that may emerge shortly after application.

Weeds are most easily controlled when actively growing. Under conditions of cold temperatures (less than 40° F, maximum daytime temperatures), weed control may be less than optimal.

For maximum weed control, cultivate (where possible) 7 - 10 days following a postemergence **Raptor** application. This timely cultivation will enhance residual weed activity, especially under dry conditions.

**Raptor** should be applied a minimum of one hour before rainfall or overhead irrigation.

**ALFALFA**

**DIRECTIONS FOR USE**

Apply **Raptor** as an early postemergence treatment when weeds are actively growing and before they exceed a height of 3 inches, unless otherwise indicated. Delay application until the majority of the weeds are at the recommended growth stage. Apply **Raptor** to crop and weeds that are actively growing.

**USE RATE**

Apply **Raptor** postemergence only at a broadcast rate of 0.031 - 0.047 lb imazamox a.e. per acre (4 to 6 ounces **Raptor** per acre) to seedling or established alfalfa grown for forage, hay or seed. At the recommended application rate, 1 gallon of **Raptor** will treat 21-32 acres.

**SEEDLING ALFALFA**

Apply **Raptor** when the seedling alfalfa is in the second (2nd) trifoliate stage or larger and when the majority of the weeds are 1-3 inches tall. When applied to alfalfa grown for seed, apply **Raptor** before bud formation. For prostrate growing weeds (such as mustards and filaree) apply **Raptor** before the rosette exceeds 3 inches. When **Raptor** is applied to seedling alfalfa, there may be a temporary reduction in growth. Alfalfa soon outgrows any effects of the herbicide.

**ESTABLISHED ALFALFA**

**Raptor** can be applied to established alfalfa in the fall, winter, or in the spring to dormant, or semi-dormant alfalfa, or between cuttings. Any application should be made before significant alfalfa growth or re-growth (3 inches) to allow **Raptor** to reach the target weeds.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

A maximum of 0.047 lb imazamox a.e./acre (6 ounces per acre of **Raptor**) per season may be applied to alfalfa.

**DO NOT** make sequential applications of **Pursuit® herbicide** followed by **Raptor** (or **Raptor** followed by **Pursuit**) within a 60 day timeframe due to increased potential alfalfa crop response.

**WEEDS CONTROLLED**

**Raptor** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

	<b>Broadleaf Weeds Controlled by Raptor</b>		
	<b>Application Rate</b>		
	<b>4 fluid oz/A</b>	<b>5 fluid oz/A</b>	<b>6 fluid oz/A</b>
	<b>Maximum Weed Size (inches)</b>		
Bedstraw		3	3
Beet, wild	3	3	3
Buckwheat, wild		3	3
Buttercup		3	3
Canola, volunteer	3	3	3
Cocklebur, common	3	3	3
Flixweed	3	3	3
Filaree,			
Redstem			3
Whitestem			3
Henbit			2
Knotweed, prostrate		3	3
Kochia <sup>1</sup>		3	3
Lambsquarters, common	3 <sup>2</sup>	3	3
Lettuce, miners		3	3
Jimsonweed	3	3	3
Mallow,			
Common	3	3	3
Venice		1	1
Morningglory,			
Entireleaf		3	3
Ivyleaf		3	3
Smallflower		3	3
Tall		3	3
Mustard,			
Tumble ( <i>Sisymbrium altissimum</i> )	3	3	3
Wild ( <i>Brassica kaber</i> )	3	3	4
Black ( <i>Brassica nigra</i> )	3	3	4
Nightshade,			
Black	3	5	5
Eastern black	3	5	5
Hair	3	4	5
Nettle, burning		2	2
Nettleleaf goosefoot	3	3	3
Pennycress, field	3	3	3

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**Broadleaf Weeds Controlled by Raptor® Herbicide (Cont.)**

	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
Maximum Weed Size (inches)			
Pigweed,			
Redroot	3	4	5
Smooth	3	4	4
Spiny	3	3	3
Purslane, common			3
Radish, wild	3	3	3
Rocket, London		3	3
Rocket, yellow		4	4
Shepherdspurse			3
Smartweed,			
Ladysthumb	3	3	3
Pennsylvania	3	3	3
Swamp		3	3
Spurge, prostrate		3	3
Sunflower, common		3	3
Swinecress		3	3
Tansymustard, green	3	3	4
Thistle, Russian		3	3
Velvetleaf	3	4	5
Willoweed panicle		3	3

<sup>1</sup> Raptor controls non-ALS resistant kochia only.  
<sup>2</sup> Raptor controls common lambsquarters at 4 oz/A east of the Rocky Mountains.

**Broadleaf Weeds Suppressed by Raptor Applications**

	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
Maximum Weed Size (inches)			
Chickweed, common	3	3	3
Dandelion			3
Dock, curly		3	3
Dodder <sup>1</sup>			3
Fiddleneck			3
Ragweed,			
Common		3	3
Giant		3	3
Thistle, Canada			3
Shepherdspurse	3	3	
Sowthistle		3	3

<sup>1</sup> For suppression of dodder, apply Raptor after the dodder has emerged until soon after dodder attaches to the alfalfa.

**Grass Weeds Controlled by Raptor**

	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
Maximum Weed Size (inches)			
Barnyardgrass		3	3
Blackgrass	3	3	3
Brome,			
California	3	3	3
Downy	3	3	3
Cheat	3	3	3
Japanese	3	3	3
Canarygrass, littleseed	3	3	3
Cereals, volunteer			
Barley	3	3	3
Oat	3	3	3
Wheat (non-CLEARFIELD®)	3	3	3
Corn, volunteer	4	5	8
Crabgrass, large		3	3
Darnel, Persian	3	3	3
Foxtail,			
Giant	3	4	5
Green	3	3	4
Yellow	3	3	4
Johnsongrass, seedling		3	3
Jointed goatgrass	3	3	3
Lovegrass	3	3	3
Millet, wild proso		3	3
Oats, wild	3	3	3
Ryegrass, Italian	3	3	3
Rye, feral or cereal		3	3
Shattercane	3	4	5

**Grass Weeds Suppressed by Raptor**

	Application Rate		
	4 fluid oz/A	5 fluid oz/A	6 fluid oz/A
Maximum Weed Size (inches)			
Bluegrass, annual			3
Johnsongrass, rhizome			3
Sedges,			
Purple			3
Yellow			3
Quackgrass			3

**TANK MIX COMBINATIONS WITH OTHER HERBICIDES**

To control weeds not listed on the Raptor label, herbicides such as Buctril® (seedling alfalfa only), 2,4-DB, Poast® herbicide or Poast Plus® herbicide or Prism®/Select® may be tank mixed with Raptor. When Raptor is used in combination with another

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herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded.

**CHICORY**

**DIRECTIONS FOR USE**

Apply **Raptor® herbicide** as an early postemergence treatment when weeds are actively growing and before they exceed a height of 3 inches, unless otherwise indicated. Apply **Raptor** herbicide as an early postemergence treatment when chicory has at least two and no more than four fully expanded true leaves present. Do not apply to chicory subjected to stress conditions such as hail damage, flooding, drought, injury from other herbicides, or widely fluctuating temperatures, as crop injury may result.

THIS PRODUCT WHEN USED IN CHICORY MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

**USE RATE**

Apply **Raptor** postemergence only at a rate of 0.031 lb imazamox a.e./acre (4 oz **Raptor** per acre). At this rate one gallon of **Raptor** will treat 32 acres of chicory. It is recommended that a registered soil-applied grass herbicide be used prior to use of **Raptor**.

APPLICATIONS OF **RAPTOR** REQUIRE THE ADDITION OF A SURFACTANT. Refer to the **MIXING INSTRUCTIONS** section for specific surfactant types and rates.

**ADDITION OF NITROGEN FERTILIZER SUCH AS 28-0-0 OR 32-0-0 LIQUID FERTILIZER MAY IMPROVE WEED CONTROL BUT ALSO INCREASES THE LIKELIHOOD OF INJURY TO CHICORY.** Add liquid fertilizer at a rate of 2.5% v/v.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces per acre of **Raptor**) during the growing season. **For use in Nebraska, Wyoming, Colorado and Montana only.**

**WEEDS CONTROLLED**

<b>Broadleaf Weeds Controlled by Raptor</b>	
<b>Raptor at 4 fl oz/A with a surfactant</b>	
<b>Maximum Weed Size (inches)</b>	
Beet, wild	3
Jimsonweed	3
Flixweed	3
Lambsquarters	3

<b>Broadleaf Weeds Controlled by Raptor (Cont.)</b>	
<b>Raptor at 4 fl oz/A with a surfactant</b>	
<b>Maximum Weed Size (inches)</b>	
<b>Mustard,</b>	
Tumble	3
Wild	3
Black	3
<b>Nightshade,</b>	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
<b>Pigweed,</b>	
Redroot	3
Smooth	3
Spiny	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

<b>Grass Weeds Controlled by Raptor</b>	
<b>Raptor at 4 fl oz/A with a surfactant</b>	
<b>Maximum Weed Size (inches)</b>	
<b>Brome,</b>	
Downy	3
Cheat	3
Japanese	3
<b>Cereals, volunteer</b>	
Barley	3
Oat	3
Wheat (non-CLEARFIELD*)	3
Darnel, Persian	3
<b>Foxtail,</b>	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Shattercane	3

<b>Grass Weeds Suppressed by Raptor Applications</b>	
<b>Raptor at 4 fl oz/A with a surfactant</b>	
<b>Maximum Weed Size (inches)</b>	
<b>Crabgrass,</b>	
Large	3
Smooth	3
<b>Sedges,</b>	
Purple	3
Yellow	3
Quackgrass	3

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# CRIMSON, RED AND WHITE CLOVER GROWN FOR SEED

## DIRECTIONS FOR USE NOT FOR USE IN CALIFORNIA

### APPLICATION INSTRUCTIONS APPLICATION TIMING:

Apply **Raptor**® herbicide as an early postemergence treatment in a tankmix as described below when the crimson, red, and white clover has a minimum of 2 trifoliate leaves and when the majority of the weeds are 1-3 inches. **Raptor** applications must be made prior to clover bloom.

### USE RATE

Apply **Raptor** at a broadcast rate of 0.04 lb imazamox a.e. per acre (5 ounces **Raptor**) per acre postemergence only.

APPLICATIONS OF **RAPTOR** IN CLOVER REQUIRE THE ADDITION OF A SURFACTANT, NITROGEN FERTILIZER AND **BASAGRAN**® HERBICIDE.

#### I. ADJUVANTS:

**Nonionic Surfactant:** Use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 0.25% v/v (1 quart per 100 gallons of spray solution)

OR

**Crop Oil Concentrate:** Use a crop oil concentrate at 1 pint/acre (0.5 gallons/100 gallons of spray solution).

#### II. NITROGEN FERTILIZER:

Recommended nitrogen-based fertilizers include liquid fertilizers (such as 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray-grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

#### III. Basagran® herbicide:

Add **Basagran** at 8 to 16 fluid ounces per acre to minimize crop response. **Basagran** applications at rates higher than 16 fluid ounces per acre may reduce grass control. **Basagran** may only be applied to clover grown for seed.

**Raptor** plus **Basagran** tank mix should be applied a minimum of four hours before rainfall or overhead irrigation.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** make more than one **Raptor** application (0.04 lb a.e. per acre imazamox) per growing season.

If arid conditions occur during the year of application, rotational crop injury may occur.

**DO NOT** apply to clover 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** apply to weeds under stress, such as lack of moisture, previous herbicide injury, mechanical injury or cold temperatures, as unsatisfactory control could result.

**DO NOT** apply more than a total of 4 pints of **Basagran** per acre, per calendar year or 2.0 pounds of bentazon active ingredient (a.i.) from all sources per acre, per calendar year.

### WEEDS CONTROLLED

**Raptor** will control or suppress the weeds listed below when applied postemergence to 1 to 3 inch weeds (unless otherwise indicated) at the recommended rates listed below.

Broadleaf Weeds Controlled by Raptor	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
Maximum Weed Size (Inches)	
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Cocklebur, common	3
Flixweed	3
Jimsonweed	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3
Velvetleaf	3



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<b>Broadleaf Weeds Suppressed by Raptor® Herbicide</b>	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran® herbicide	
	Maximum Weed Size (inches)
Buckwheat, wild	3
Chickweed, common	3
Knotweed, prostrate	3
Kochia <sup>1</sup>	3
Lambsquarters, common	3
Lettuce, miners	3
Morningglory,	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3
Rocket, yellow	3
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup> Raptor controls non-ALS resistant kochia only.

<b>Grass Weeds Controlled by Raptor</b>	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
	Maximum Weed Size (inches)
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD <sup>1</sup> )	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone-tolerant corn.

<b>Grass Weeds Suppressed by Raptor Applications</b>	
Raptor at 5 fluid oz/A with a surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
	Maximum Weed Size (inches)
Barnyardgrass	3
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3
Sedges,	
Purple	3
Yellow	3
Quackgrass	3

**DRY BEANS AND DRY PEAS**  
(Excluding English Peas, Lima Beans (Succulent) and Snap Beans)

**DIRECTIONS FOR USE**  
**DO NOT APPLY RAPTOR TO DRY BEANS AND DRY PEAS IN CALIFORNIA.**  
Raptor may be applied to the following dry beans and dry peas:

Dry Beans		Dry Peas
Adzuki	Navy	Dry edible peas (field peas) Southern peas (cow peas)
Anazazi	Pink	
Black	Pinto	
Black Turtle	Red kidney	
Cranberry	Small red	
Great Northern	Small white	
Lima (dry)		

**DO NOT apply Raptor to succulent peas, snap beans or fresh limas (except as specifically directed below).**

**DO NOT apply Raptor to chickpeas (garbanzo beans), or lentils.**

Reduced crop growth, temporary yellowing, quality, yield and/or delayed maturity may result from a Raptor application to dry beans and dry peas crops listed on this label. Since crop maturity may be delayed, timing of harvest may need to be adjusted accordingly. **DO NOT apply Raptor** if planting is delayed and chance of frost prior to maturity is likely. Some varieties of dry beans and dry peas are more sensitive to Raptor than other varieties. Growers should check with the seed company regarding the safety of Raptor to their variety.

**USE RAPTOR ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

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**Raptor** is effective in controlling weeds in conservation tillage and conventional production systems. Apply **Raptor** postemergence to dry beans with at least one fully expanded trifoliolate leaf and to dry peas with at least 3 pairs of leaves and before the bloom stage. Delay application until the majority of the weeds are at the recommended growth stage. Application timing should be based on weed size and crop growth stage. Apply **Raptor® herbicide** to crop and weeds that are actively growing.

THIS PRODUCT WHEN USED ON DRY BEANS AND DRY PEAS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

**USE RATE**

Apply 0.031 lb imazamox a.e./acre (4 fluid ounces of **Raptor** per acre). At this application rate, 1 gallon will treat 32 acres of dry beans and dry peas.

**NOTE: ADDITIONAL MIXING INSTRUCTIONS FOR DRY BEANS AND DRY PEAS.**

**Raptor** applications may be made to dry beans and dry peas either with or without the addition of a fertilizer. The addition of nitrogen-based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of dry bean response. When nitrogen and/or crop oils are added to the mixture, add **Basagran® herbicide** as a tank mixture partner at a rate of 6 to 16 oz/A to minimize crop response. For applications to dry peas, always add **Basagran** to the spray mixture, regardless of additives added. For enhanced grass activity, add a crop oil instead of surfactant. At 16 oz/A, **Basagran** will enhance control of common lambsquarters and kochia. **Basagran** applications at rates higher than 16 oz./A may reduce grass control.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

Only one application of **Raptor** may be made during the season.

A maximum of 0.031 lb imazamox a.e./acre (4 ounces of **Raptor** per acre) per season may be applied to dry beans.

**Raptor applications must be made before dry beans and dry peas bloom.**

**WEEDS CONTROLLED**

**Raptor** will control or suppress the weeds listed below when applied postemergence to 1- to 3-inch weeds (unless otherwise indicated) at the recommended rates listed below.

<b>Broadleaf Weeds Controlled by Raptor</b>		
	<b>Application Rate</b>	
	<b>4 fluid oz/A with a nonionic surfactant</b>	<b>4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran</b>
<b>Maximum Weed Size (inches)</b>		
Bedstraw		3
Beet, wild	3	3
Buttercup		3
Chickweed, common		3
Cocklebur, common		3
Flixweed	3	3
Jimsonweed	3	3
Lambsquarters, common <sup>1</sup>	3	3
Mustard,		
Tumble	3	3
Wild	3	3
Black	3	3
Nightshade,		
Black	3	3
Eastern black	3	3
Hairy	3	3
Pennycress, field	3	3
Pigweed,		
Redroot	3	3
Smooth	3	3
Spiny	3	3
Puncturevine		3
Radish, wild	3	3
Shepherdspurse	3	3
Tansymustard, green	3	3
Velvetleaf		3

<sup>1</sup> **Raptor** controls common lambsquarters at 4 oz/A east of the Rocky Mountains.

<b>Broadleaf Weeds Suppressed by Raptor</b>		
	<b>Application Rate</b>	
	<b>4 fluid oz/A with a nonionic surfactant</b>	<b>4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran</b>
<b>Maximum Weed Size (inches)</b>		
Buckwheat, wild		3
Chickweed, common	3	
Knotweed, prostrate		3
Kochia <sup>1</sup>		3
Lettuce, miners		3

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Broadleaf Weeds Suppressed by Raptor® Herbicide (Cont.)	
Application Rate	
4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran® herbicide
Maximum Weed Size (inches)	
Morningglory,	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3
Rocket, yellow	3
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup> Raptor controls non-ALS resistant kochia only.

Grass Weeds Controlled by Raptor	
Application Rate	
4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran
Maximum Weed Size (inches)	
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD®)	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone-tolerant corn.

Grass Weeds Suppressed by Raptor Applications		
Application Rate		
4 fluid oz/A with a nonionic surfactant	4 fluid oz/A with a nonionic surfactant or a crop oil, nitrogen-based fertilizer and Basagran	
Maximum Weed Size (inches)		
Barnyardgrass		3
Johnsongrass, rhizome		3
Crabgrass,		
Large	3	3
Smooth	3	3
Sedges,		
Purple	3	3
Yellow	3	3
Quackgrass	3	3

## ENGLISH PEAS

### DIRECTIONS FOR USE

For Postemergence Use on English Peas in Delaware, Illinois, Maryland, Minnesota, New York and Wisconsin, Only.

Use Raptor ONLY if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

Reduced crop growth, temporary yellowing, quality, yield and/or delayed maturity may result from a Raptor application to English peas. Since crop maturity may be delayed, timing of harvest may need to be adjusted accordingly. **DO NOT** apply Raptor if planting is delayed and a chance of frost prior to maturity is likely. Growers should check with the seed company regarding the safety of Raptor to their variety.

THIS PRODUCT WHEN USED ON ENGLISH PEAS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

### USE RATE

**Early Postemergence Applications:** Apply Raptor at the broadcast rate of 0.023 lb imazamox a.e./acre (3 fluid ounces per acre). Application timing should be based on weed size and crop growth stage. Apply Raptor to crop and weeds that are actively growing.

Apply Raptor postemergence to English peas at least 3 inches in height but prior to 5 nodes before flowering. The use of trifluralin prior to a Raptor

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application may increase the likelihood and severity of crop injury.

A non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

The addition of a nitrogen-based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of English pea response.

When nitrogen-based fertilizer is added to the mixture, add **Basagran® herbicide** as a tank mix partner at the rate of 6 to 16 ounces per acre to minimize crop response. Recommended nitrogen based fertilizers include liquid fertilizers (such as 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution.

Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

For enhanced grass activity, add a crop oil concentrate at a rate of 1 gallon per 100 gallons per acre instead of a non-ionic surfactant. Always add **Basagran** at the rates indicated above when crop oil concentrate and/or a nitrogen based fertilizer are used in the spray mixture. **Basagran** applications at rates higher than 16 ounces per acre may reduce grass control.

**Raptor® herbicide** may be applied a minimum of one hour before rainfall or overhead irrigation.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Only one application of **Raptor** may be made during the season.

A maximum of 0.023 lb imazamox a.e./acre (3 fluid ounces of **Raptor** per acre) per season may be applied to English peas.

Weeds Controlled by Raptor		
	Application Rate	
	Raptor at 3 oz/A	Raptor at 3 oz/A + Basagran at 6 - 16 oz/A
Maximum Weed Size (inches)		
Nightshade,		
Black	3	3
Eastern black	3	3
Hairy	3	3
Mustard		
Tumble	3	3
Wild	3	3
Black	3	3
Pennycress, field	3	3

### Weeds Controlled by Raptor (Cont.)

	Application Rate	
	Raptor at 3 oz/A	Raptor at 3 oz/A + Basagran at 6 - 16 oz/A
Maximum Weed Size (inches)		
Pigweed,		
Redroot	3	3
Smooth	3	3
Spiny	3	3
Shepherdspurse	3	3

## LIMA BEANS (Succulent)

### DIRECTIONS FOR USE

**For Postemergence Use in Lima Beans (succulent) in Delaware, Illinois, Maryland, Minnesota, Virginia and Wisconsin Only.**

**Use Raptor ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following **Raptor** applications in lima beans. These effects can be more pronounced if crops are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within days.

THIS PRODUCT WHEN USED ON LIMA BEANS (SUCCULENT) MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

### USE RATE

**Early Postemergence Applications:** Apply **Raptor** at the broadcast rate of 0.031 lb imazamox a.e./acre (4 fluid ounces per acre), tank mixed with **Basagran** at 6 to 16 ounces per acre. When used in lima beans, **Raptor** must be applied with **Basagran** to minimize crop response. **Basagran** applications at rates higher than 16 ounces per acre may reduce grass control.

Application timing should be based on weed size and crop growth stage. Apply to crop and weeds that are actively growing. Apply **Raptor + Basagran** postemergence to lima beans in the first to second trifoliolate leaf stage and weeds that are less than 3 inches tall. Applications before the first trifoliolate leaf stage may result in increased crop response. **DO NOT** apply **Raptor + Basagran** to lima beans during flowering.

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A non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

**Raptor® herbicide** tank mixes with any pesticide other than **Basagran® herbicide** are not recommended. Certain insecticide and herbicide tank mixes with **Raptor** in lima beans have shown unacceptable crop response.

**Raptor** may be applied a minimum of one hour before rainfall or overhead irrigation.

### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Only one application of **Raptor** may be made during the season.

A maximum of 0.031 lb imazamox a.e./acre (4 ounces of **Raptor** per acre) per season may be applied to lima beans (succulent) in Delaware, Illinois, Maryland, Minnesota, Virginia and Wisconsin only.

Broadleaf Weeds Controlled by Raptor	
Application Rate	
Raptor at 4 oz./A + Basagran at 6 - 16 oz./A	
Maximum Weed Size (inches)	
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Jimsonweed	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

Broadleaf Weeds Suppressed by Raptor	
Application Rate	
Raptor at 4 oz./A + Basagran at 6 - 16 oz./A	
Maximum Weed Size (inches)	
Buckwheat, wild	3
Chickweed, common	3
Cocklebur, common	3
Lambsquarters, common	3
Knotweed, prostrate	3
Kochia <sup>1</sup>	3
Lettuce, miners	3
Morningglory	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3
Smartweed	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup> **Raptor** controls non-ALS resistant kochia only.

Grass Weeds Controlled by Raptor	
Application Rate	
Raptor at 4 oz./A + Basagran at 6 - 16 oz./A	
Maximum Weed Size (inches)	
Barnyardgrass	3
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD <sup>1</sup> )	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone tolerant corn

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Grass Weeds Suppressed by Raptor® Herbicide	
Application Rate	
Raptor at 4 oz/A + Basagran® Herbicide at 6 - 16 oz/A	
Maximum Weed Size (Inches)	
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3
Sedges	
Purple	3
Yellow	3
Quackgrass	3

### SNAP BEANS

#### DIRECTIONS FOR USE

Raptor may be applied to snap beans in the States of Delaware, Idaho, Indiana, Illinois, Maryland, Michigan, Minnesota, New York, Oregon, Pennsylvania, Virginia, Washington and Wisconsin only.

Occasionally, internode shortening and/or temporary yellowing of snap beans may occur following Raptor application. These effects can be more pronounced if snap beans are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within days.

Use Raptor® herbicide ONLY if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans. DO NOT apply to snap beans that have been injured from applications of soil-applied herbicides.

Apply Raptor postemergence to snap beans with at least one fully expanded trifoliolate and before the bloom stage. For use in Idaho, Oregon and Washington, apply Raptor to snap beans at first or second trifoliolate leaf stage. Delay application until the majority of the weeds are at the recommended growth stage. Application timing should be based on weed size and crop growth stage. Apply Raptor to crop and weeds that are actively growing. DO NOT apply Raptor to snap beans during flowering.

THIS PRODUCT WHEN USED ON SNAP BEANS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

#### USE RATE

Apply Raptor at the broadcast rate of 0.031 lb imazamox a.e./acre (4 ounces Raptor per acre),

tank mixed with Basagran at 6 to 16 ounces per acre. When used in snap beans, Raptor must be applied with Basagran to minimize crop response. Basagran applications at rates higher than 16 ounces per acre may reduce grass control.

#### NOTE: ADDITIONAL MIXING INSTRUCTIONS FOR SNAP BEANS.

For use in Delaware, Idaho, Indiana, Illinois, Maryland, Michigan, Minnesota, New York, Oregon, Pennsylvania, Virginia, Washington and Wisconsin, a non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

For use in Idaho, Oregon and Washington, a non-ionic surfactant and nitrogen fertilizer must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution. Alternatively, a crop oil concentrate (COC) or methylated seed oil (MSO) can be used. Use COC at a rate of 1 gallon per 100 gallons of spray solution. Use MSO at a rate of 1 - 2 gallons per 100 gallons of spray solution. Recommended nitrogen based fertilizers include liquid fertilizers such as 28-0-0, 32-0-0, or 10-34-0 at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12 - 15 pounds per 100 gallons of spray solution.

Raptor tank mixes with any pesticide other than Basagran are not recommended. Certain insecticide and herbicide tank mixes with Raptor in snap beans have shown unacceptable crop response.

#### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Only one application of Raptor may be made during the season.

A maximum of 0.031 lb imazamox a.e./acre (4 ounces of Raptor per acre) per season may be applied to snap beans.

Raptor applications must be made before snap bean bloom.

#### WEEDS CONTROLLED

Raptor will control or suppress the weeds listed below when applied postemergence to 1 to 3 inch weeds (unless otherwise indicated) at the recommended rates listed below.

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<b>Broadleaf Weeds Controlled by Raptor® Herbicide</b>	
<b>Application Rate</b>	
Raptor at 4 oz./A + Basagran® herbicide at 6 - 16 oz./A	
<b>Maximum Weed Size (inches)</b>	
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Jimsonweed	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

<b>Broadleaf Weeds Suppressed by Raptor</b>	
<b>Application Rate</b>	
Raptor at 4 oz./A + Basagran® herbicide at 6 - 16 oz./A	
<b>Maximum Weed Size (inches)</b>	
Buckwheat, wild	3
Chickweed, common	3
Cocklebur, common	3
Lambsquarters, common	3
Knotweed, prostrate	3
Kochia <sup>1</sup>	3
Lettuce, miners	3
Morningglory,	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup> Raptor controls non-ALS resistant kochia only.

<b>Grass Weeds Controlled by Raptor</b>	
<b>Application Rate</b>	
Raptor at 4 oz./A + Basagran at 6 - 16 oz./A	
<b>Maximum Weed Size (inches)</b>	
Barnyardgrass	3
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD®)	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone tolerant corn.

<b>Grass Weeds Suppressed by Raptor</b>	
<b>Application Rate</b>	
Raptor at 4 oz./A + Basagran at 6 - 16 oz./A	
<b>Maximum Weed Size (inches)</b>	
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3
Sedges,	
Purple	3
Yellow	3
Quackgrass	3

**SOYBEANS**

**DIRECTIONS FOR USE**  
Raptor is effective in controlling weeds in conservation tillage and conventional production systems. Raptor can be applied early postemergence in soybeans but before the bloom stage. Refer to the specific treatment under the **APPLICATION INFORMATION** section of the label.

Unusually cool temperatures (50° F or less) reduce photosynthesis and transpiration and thus reduce

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uptake, translocation, and efficacy of **Raptor® herbicide** in weeds. Delaying a **Raptor** application for 48 hours from the time the temperature increases to above 50° F, if air temperature has been below 50° F for 10 or more hours, will improve weed control and reduce crop response.

**NO-TILL/MINIMUM TILLAGE AND DOUBLE CROP SOYBEANS**

**Raptor** controls existing weeds and provides residual activity on some weeds when applied early postemergence to soybeans in no-till or minimum tillage and double crop soybean production systems. The application must be applied after emergence of the crop. (Refer to the **WEEDS CONTROLLED** chart for weeds controlled and recommended weed size).

To ensure thorough coverage, use a minimum of 20 gallons of water per acre in no-till or minimum tillage systems. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Prior to planting or emergence of soybeans, Touchdown® herbicide or Roundup Ultra® herbicide or any glyphosate-containing product registered for that use may be applied to control emerged weeds. See specific product labeling for rates, recommendations, precautions and restrictions.

**USE RATES**

**APPLY 0.031 LB IMAZAMOX A.E./ACRE (4 FLUID OUNCES OF RAPTOR® HERBICIDE PER ACRE) WHEN PRECEDED BY A FULL RATE OF A REGISTERED SOIL-APPLIED GRASS HERBICIDE LIKE PROWL® 3.3 EC HERBICIDE**

OR

**APPLY 0.040 LB IMAZAMOX A.E./ACRE (5 FLUID OUNCES OF RAPTOR PER ACRE) IN A TOTAL POSTEMERGENCE HERBICIDE PROGRAM.**

**Raptor** may be applied postemergence at a broadcast rate of 4 fluid ounces per acre when it is preceded with a full labeled rate of a soil-applied grass herbicide such as **Prowl 3.3 EC**. At this rate one gallon of **Raptor** will treat 32 acres of soybeans. **Raptor** may be applied postemergence at a broadcast rate of 5 fluid ounces per acre (including minimum and no-till). At this broadcast rate, one gallon of **Raptor** will treat 25.6 acres of soybeans.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

**Raptor** applications must be made before soybean bloom.

Only one application of **Raptor** may be made during the season. Do not apply more than 0.04 lb a.e. imazamox (5 oz **Raptor**) per acre per season.

If soybeans are furrow irrigated, till the soil prior to planting winter wheat or barley. The beds should be broken up and the soil mixed with tillage equipment set to cut 4-6 inches deep.

**WEEDS CONTROLLED**

When applied as directed, **Raptor** will control or suppress the weeds listed below as indicated. Refer to the **MIXING INSTRUCTIONS** section for recommendations when weeds are at the maximum recommended growth stage, or are under stress.

**Broadleaf Weeds Controlled by Raptor Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
Weed Size (inches)		
Artichoke, Jerusalem	3-8	3-8
Carpetweed		2-4
Chickweed, common	2-5	2-5
Cocklebur, common	2-8	2-8
Jimsonweed	2-6	2-6
Kochia <sup>2</sup>	1-4	1-4
Lambsquarters, common	2-5	2-5
Marshelder	2-4	2-4
Mallow, Venice	1-4	
Morningglory,		
Entireleaf	2-4	
Ivyleaf	2-4	
Smallflower	2-4	
Tall	2-4	
Mustard spp.	2-8	2-8
Nightshade,		
Black	2-5	2-5
Eastern black	2-5	2-5
Hairy	2-5	2-5
Pigweed,		
Palmer amaranth <sup>3</sup>	2-4	2-4
Prostrate	2-5	2-5
Redroot	2-8	2-8
Smooth	2-8	2-8
Spiny	2-5	2-5
Puncturevine	1-3	
Purslane, common	1-3	1-3
Pusley, Florida		2-4
Radish, wild	2-4	2-4
Ragweed,		
Giant <sup>3</sup>	2-5	2-5
Common <sup>3</sup>	2-5	
Smartweed,		
Ladysthumb	2-5	2-5
Pennsylvania	2-5	2-5



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**Broadleaf Weeds Controlled by Raptor® Herbicide Alone or in a Sequential<sup>1</sup> Program (Cont.)**

	Application Rate	
	Raptor Postemergence Alone	Prowl® 3.3 EC Herbicide Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
	Weed Size (inches)	
Spurge, annual		2-4
Sunflower	2-8	2-8
Velvetleaf	2-8	2-8

- <sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.
- <sup>2</sup> Control of light to moderate populations only. For control of heavier populations use a SEQUENTIAL APPLICATION with a soil-applied grass herbicide as described above.
- <sup>3</sup> Control of light to moderate populations of ALS-susceptible biotypes only. For control of heavier populations of ALS-tolerant biotypes see the **HERBICIDE COMBINATION** section.

**Broadleaf Weeds Suppressed by Raptor Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
	Weed Size (inches)	
Bindweed,		
Field (seedling)	2-4	2-4
Hedge (seedling)	2-4	2-4
Buckwheat, wild	1-3	1-3
Mallow, Venice <sup>2</sup>		1-4
Morningglory,		
Entireleaf <sup>2</sup>		2-4
Ivyleaf <sup>2</sup>		2-4
Pitted	2-4	2-4
Smallflower <sup>2</sup>		2-4
Tall <sup>2</sup>		2-4
Ragweed, common <sup>2</sup>		2-5
Sida, prickly	2-4	2-4
Sowthistle, annual	2-4	2-4
Thistle, Canada	2-5	2-5

- <sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.
- <sup>2</sup> For control see the 5-ounce rate and **HERBICIDE COMBINATIONS** section.

**Grass Weeds Controlled by Raptor Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl 3.3 EC Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
	Weed Size (inches)	
Barley, wild	2-4	2-4
Barnyardgrass	2-5 <sup>2</sup>	2-5
Crabgrass,		
large		2-4
smooth		2-4
Crowfoot grass		2-5
Cupgrass, woolly		2-4
Foxtail,		
Giant	2-6	2-6
Green	2-6	2-6
Yellow	2-6	2-6
Goosegrass		2-5
Johnsongrass,		
Seedling	4-8	4-8
Millet, wild proso	2-4 <sup>2</sup>	2-4
Oats, wild	2-6	2-6
Panicum,		
Fall	2-6	2-6
Texas		2-6
Sandbur, field <sup>3</sup>		2-5
Shattercane	2-8	2-8
Signalgrass, broadleaf	2-5 <sup>2</sup>	2-5
Volunteer corn <sup>4</sup>	2-8	2-8
Volunteer wheat (non-CLEARFIELD*)	2-4 <sup>3</sup>	2-4
Witchgrass		2-5

- <sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a post-emergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.
- <sup>2</sup> Control of light to moderate populations only. For control of heavier populations use a SEQUENTIAL APPLICATION with a soil-applied grass herbicide as described above.
- <sup>3</sup> For control, a dinitroaniline (DNA) herbicide such as **Prowl 3.3 EC** must be soil-applied at a full-labeled rate.
- <sup>4</sup> Except imidazolinone-tolerant corn.

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**Grass Weeds Suppressed by Raptor® Herbicide Alone or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Raptor Postemergence Alone	Prowl® 3.3 EC Herbicide Soil-applied Followed by Raptor <sup>1</sup> Postemergence
	5 oz /A	4 oz /A
	Weed Size (inches)	
Crabgrass.		
Large,	2-4	
Smooth	2-4	
Cupgrass, woolly	2-4	
Goosegrass	2-4	
Itchgrass		2-5
Johnsongrass, rhizome	6-12	6-12
Quackgrass		4-8
Red rice		2-5
Stinkgrass	2-4	
<b>SEDGES</b>		
Nutsedge.		
Purple	1-3	1-3
Yellow	1-3	1-3

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Raptor** at a broadcast rate of 4 fluid ounces per acre.

**HERBICIDE COMBINATIONS  
GRASS WEEDS**

Use a soil-applied grass herbicide (such as **Prowl 3.3 EC**) if heavy infestations of some grass weeds exist or if **Raptor** does not control the species present. Refer to the **Prowl 3.3 EC** (or other grass herbicide) label for specific use recommendations, rates and precautions.

Roundup Ultra® may be tank-mixed with **Raptor** to aid in control of certain grasses only in Roundup Ready® Soybeans. Other glyphosate containing products registered for use on Roundup Ready soybeans may be substituted for Roundup Ultra. See the Roundup Ultra label (or other product labels) for rates and weeds controlled. **DO NOT** tankmix **Raptor** with **Extreme®** or **Backdraft®** herbicides. If a selective postemergence grass herbicide such as **Poast Plus® herbicide** is mixed with **Raptor** to control species that are not controlled with **Raptor** alone, include a methylated seed oil, or a crop oil concentrate (1-2 gallons per 100 gallons) AND liquid fertilizer (2.5 gallons per 100 gallons) should be added to the tank-mixture. In some cases the activity of the grass herbicide may be reduced when mixed with **Raptor**. The reduction in activity may be overcome by delaying the application of the postemergence grass herbicide 7 days following the application of **Raptor**. If the poste-

mergence grass herbicide is applied first, wait 3 days before applying **Raptor**. Refer to the respective grass herbicide label for recommended application rate, weed size and restrictions.

**BROADLEAF WEEDS**

Roundup Ultra® herbicide may be tank-mixed with **Raptor** to aid in control of certain broadleaf weeds only in Roundup Ready® Soybeans. See the Roundup Ultra label for rates and weeds controlled.

Tank-mixing **Raptor** and certain broadleaf herbicides (e.g. diphenylethers and **Basagran® herbicide**) can reduce grass control, therefore a sequential program including a soil-applied grass herbicide such as **Prowl 3.3 EC** is recommended for optimal control.

**ENHANCED CONTROL OF RAGWEED SPECIES, PALMER AMARANTH, WATERHEMP AND KOCHIA**

Use a soil application of **Prowl 3.3 EC** followed by a postemergence application of **Raptor** at a broadcast rate of 4 to 5 fluid ounces per acre plus a diphenylether such as Ultra Blazer™ herbicide (acifluorfen) or Roundup Ultra for enhanced control of ragweeds, Palmer amaranth, waterhemp, and kochia. Refer to the **Prowl 3.3 EC** and Ultra Blazer or Roundup® Ultra labels for specific use recommendations, rates, restrictions and precautions.

When tank-mixing **Raptor** and Ultra Blazer, apply **Raptor** at a broadcast rate of 5 fluid ounces per acre or 4 fluid ounces per acre when preceded by a full rate of a registered soil-applied grass herbicide. Apply Ultra Blazer at the following rates depending on weed height:

**Ultra Blazer Rate (ounces per acre)<sup>1</sup>**

Weed	8-10 oz	12-14 oz	16-20 oz
Ragweed spp.	2-4"	4-6"	6-8"
Palmer amaranth	2-4"	4-6"	6-8"
Waterhemp spp.	2-4"	4-6"	6-8"
Kochia	2-4"	4-6"	6-8"

<sup>1</sup> Use the higher rate if common ragweed is present or the weed population is high.

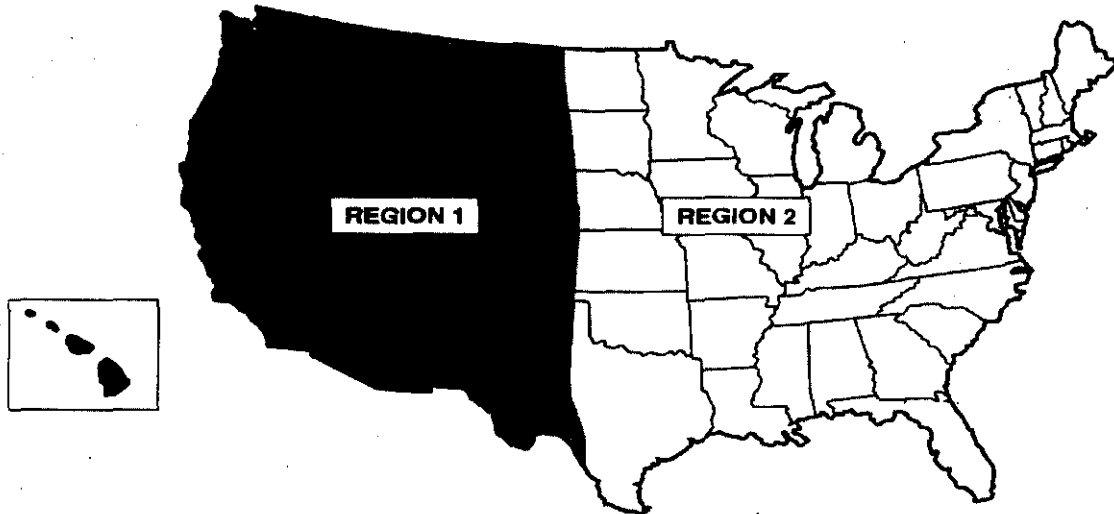
**ENHANCED CONTROL OF RAGWEED AND GIANT RAGWEED**

Firstrate® herbicide may be tank-mixed with **Raptor** to aid in the control of common ragweed and giant ragweed. When tank-mixing Firstrate with **Raptor**, apply 0.15 to 0.3 ounces per acre of Firstrate. Use the higher rate when weeds approach maximum labeled size. See the Firstrate label for recommended rates and precautions.

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## ROTATIONAL CROP RESTRICTIONS

Rotational crops may be planted after applying the recommended rate of **Raptor® herbicide** in the regions as indicated below.



**Region 1** consists of states and parts of states WEST of U.S. Highway 83 (Arizona, California, Hawaii, Idaho, Oregon, Washington, Utah, Nevada, New Mexico, Wyoming, Montana, Colorado, and western parts of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Texas).

**Region 2** consists of states and parts of states to the EAST of U.S. Highway 83 (Includes the eastern parts of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, and the states to the east of these states).

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### Rotational Interval (months) Following an Application of Raptor® herbicide

PLANT-BACK INTERVAL (MONTHS)	REGION 1	REGION 2
ANYTIME	CLEARFIELD* canola CLEARFIELD* wheat CLEARFIELD* sunflower Dry beans and dry peas soybeans	CLEARFIELD* canola CLEARFIELD* wheat CLEARFIELD* sunflower Dry beans and dry peas soybeans
THREE MONTHS	Alfalfa Wheat (non-CLEARFIELD*)	Alfalfa Wheat (non-CLEARFIELD*)
FOUR MONTHS	Rye	Barley Rye
EIGHT AND ONE-HALF MONTHS	Corn (field, pop, seed, sweet, CLEARFIELD* and non-CLEARFIELD*)	Corn (field, pop, seed, sweet, CLEARFIELD* and non-CLEARFIELD*)
NINE MONTHS	Barley <sup>1</sup> Cantaloupe Cotton Grain Sorghum Lettuce Millets Oat Onion	Peanut Pumpkin Rice Squash Sunflower Tobacco Watermelon
		Broccoli Cabbage Cantaloupe Carrot Cotton Cucumber Grain Sorghum Lettuce Millets Oat Onion
		Peanut Pepper Potato <sup>2</sup> Pumpkin Rice Squash Sunflower Tobacco Tomato Turnip Watermelon
EIGHTEEN MONTHS	Barley <sup>1</sup> Broccoli Cabbage Carrot Cucumber <b>All other crops not listed in the ROTATIONAL CROP restrictions.</b>	Pepper Potato Tomato Turnip <b>All other crops not listed in the ROTATIONAL CROP restrictions.</b>
		Canola Condiment Mustard Sugar beet <sup>3</sup> Table beet <sup>3</sup> <b>All other crops not listed in the ROTATIONAL CROP restrictions.</b>
TWENTY-SIX MONTHS	Sugar beet <sup>4</sup> Condiment Mustard	Canola Table beet Sugar beet <sup>3</sup> Table beet <sup>3</sup>

<sup>1</sup> In **Region 1**, refer to the following table for rotational intervals for planting barley following applications of **Raptor**.

<sup>2</sup> In **Region 2**, refer to the following table for rotational intervals for planting potato following applications of **Raptor**.

<sup>3</sup> In **Region 2**, sugar beet and table beets can be planted eighteen months following an application of **Raptor** if the soil pH is uniformly 6.2 or greater. If the soil pH is less than 6.2, the rotational interval is 26 months. Sugar beet yields can be reduced when grown in soil conditions with a pH less than 6.2. If the soil is limed to adjust the soil pH, apply the lime at least 18 months prior to planting sugarbeet or other rotational crops under the 18 month rotational interval.

<sup>4</sup> For sugar beets grown in parts of Nebraska west of Highway 83 and Platte, Goshen and Laramie counties in Wyoming, follow the sugar beet rotational crop restrictions for **Region 2** for sprinkler irrigated fields only. If fields are dryland, flood or furrow irrigated, follow restrictions for **Region 1**. A minimum of 10 inches of overhead irrigation must be applied each season in order to qualify for **Region 2** guidelines.

When taking soil samples to determine soil pH, utilize a grid sampling technique, sampling to a depth of 3-4 inches.

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Barley Rotational Interval Based on pH, Moisture and Tillage (Region 1)		Moldboard plowing?	
		NO	YES
pH and Rainfall Requirements	>18" R+I AND pH >6.2	9 months	9 months
	<18" R+I OR pH <6.2	18 months	9 months

Potato Rotational Interval Based on pH and Moisture (Region 2)		
pH and Rainfall Requirements	>18" R+I AND pH >6.2	9 months
	<18" R+I OR pH <6.2	18 months

**R+I** = Rainfall and overhead irrigation from the time of **Raptor® herbicide** application to barley or potato planting. **Does not include furrow or flood irrigation.**

If the rainfall or pH requirements are not fully met, and barley is planted prior to 18 months, injury may be reduced by tillage, such as deep disking (greater than 6 inches deep) after crop harvest but prior to November 1.

**FURROW- AND FLOOD-IRRIGATED CROPS**

Following harvest of furrow- or flood-irrigated crops, the soil should be thoroughly mixed by plowing or deep disking in order to minimize the potential for herbicide carryover to the following crop.

Use of **Raptor** in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors, such as arid conditions, make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

GENERAL PRECAUTIONS
<p>In the event of a crop loss due to weather, dry beans, dry peas, <b>CLEARFIELD®</b> canola, <b>CLEARFIELD®</b> corn, <b>CLEARFIELD®</b> sunflowers, <b>CLEARFIELD®</b> wheat, or soybeans can be replanted. <b>DO NOT</b> make an additional application of <b>Raptor® herbicide</b>.</p> <p>Application of products containing chlorimuron ethyl (<b>Classic®, Canopy®, Synchrony®, Gemini®, Lorox Plus®, Preview®</b> herbicides, etc.), metsulfuron-methyl (<b>Harmony® Extra</b>), flumetsulam (<b>Broadstrike® + Dual®, Broadstrike + Treflan®</b> herbicides), imazaquin (<b>Scepter®, Squadron®, Tri-Scept®, Scepter O.T., Scepter 70 DG herbicides</b>) or imazethapyr (<b>Pursuit®, Pursuit DG, Pursuit Plus EC herbicides</b>) the same year as <b>Raptor</b> may increase the risk of injury to sensitive rotational crops. Consult all pertinent labels for recommended uses of these products in combinations.</p> <p>If arid conditions occur during the year of application, rotational crop injury may occur.</p>

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### DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on research and field use. 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, herbicide resistant weed populations, or the use of, or application of the product contrary to label instructions, all of which are beyond the control of BASF Corporation. All such risks shall be assumed by the user.

BASF MAKES THIS PRODUCT AVAILABLE TO THE USER AND/OR GROWER SOLELY TO THE EXTENT THAT THE BENEFIT AND UTILITY, IN THE SOLE OPINION OF THE USER AND/OR GROWER, OUTWEIGH THE EXTENT OF POTENTIAL INJURY ASSOCIATED WITH THE USE OF THIS PRODUCT. THE DECISION TO USE OR NOT TO USE THIS HERBICIDE MUST BE MADE BY EACH INDIVIDUAL **RAPTOR® HERBICIDE** USER AND/OR GROWER ON THE BASIS OF POSSIBLE CROP INJURY FROM **RAPTOR**, THE SEVERITY OF WEED INFESTATION, THE COST OF ALTERNATIVE WEED CONTROLS, AND OTHER FACTORS. BASF INTENDS THAT BECAUSE OF THE RISK OF FAILURE TO PERFORM OR CROP DAMAGE THAT ALL SUCH USE IS AT THE USER'S AND/OR GROWER'S RISK. BASF DISCLAIMS ANY LIABILITY FOR CLAIMS, CAUSES OF ACTION, FINES, PENALTIES, DAMAGES, INCLUDING CONSEQUENTIAL INCIDENTS AND DAMAGES, LOSSES, LIABILITIES, JUDGEMENTS, AND EXPENSES ARISING OUT OF OR RELATING TO INJURY TO PERSONS, CROPS, OR PROPERTY RESULTING FROM THE USE OF **RAPTOR** ON DRY BEANS AND DRY PEAS CONTRARY TO THE LABEL INSTRUCTIONS.

BASF shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

BASF warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the **DIRECTIONS FOR USE**, subject to the risks referred to above. **BASF DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF RAPTOR.** In no case shall BASF or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

#### USES WITH OTHER PRODUCTS (TANK MIXES)

If this product is used in combination with any other product except as specifically recommended in writing by BASF, then BASF shall have no liability for any loss, damage or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by BASF, the liability of BASF shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF product in such combination use, and in any event shall be limited to return of the amount of the purchase price of the BASF product.

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Supersedes NVA 2004-04-133-0016

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



The Chemical Company

**□ - BASF**

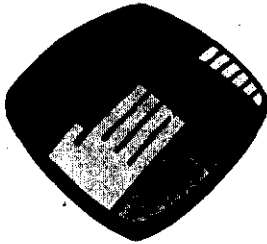
The Chemical Company

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ACCEPTED  
with COMMENTS  
in EPA Letter Dated

NOV 19 2004

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

241-379



# BEYOND™

HERBICIDE | CLEARFIELD® PRODUCTION SYSTEM

**FOR USE ON CLEARFIELD® CANOLA, CLEARFIELD® SUNFLOWER, AND  
CLEARFIELD® WHEAT,**

**Apply Only on CLEARFIELD® Canola, Sunflower and Wheat Varieties**

**Active Ingredient:**

Ammonium salt of imazamox 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H  
imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid\* .....12.1%

**Inert Ingredients:** ..... 87.9%

**Total** .....100.0%

\* Equivalent to 11.4% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-  
5-(methoxymethyl)-3-pyridinecarboxylic acid  
(1 gallon contains 1.0 pound of active ingredient as the free acid)

U.S. Patent No. 5,334,576

EPA Reg. No. 241-379

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.)

**In case of an emergency endangering life or property involving this product,  
call (800) 832-HELP (4357).**

**See Next Page for Additional Precautionary Statements**

See inside booklet for complete **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

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<b>FIRST AID</b>	
<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>
<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 first 5 minutes, then continue rinsing eye.</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 mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

### **PRECAUTIONARY STATEMENTS**

#### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

#### **CAUTION!**

Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

#### **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-resistant category selection chart.

#### **APPLICATORS AND OTHER HANDLERS MUST WEAR:**

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

Follow 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.

#### **ENVIRONMENTAL HAZARDS**

This pesticide may be hazardous to plants outside the treated area. **DO NOT** apply directly to water,

or to areas where surface water is present, or to intertidal areas below the mean high water mark. Offsite movement from spray drift, volatilization, and runoff may be hazardous to neighboring crops and vegetative habitat utilized for food and cover by wildlife and aquatic organisms. **DO NOT** contaminate water when disposing of equipment washwaters.

#### **IN CASE OF EMERGENCY:**

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

CHEMTREC (800) 424-9300

BASF Corporation (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 (800) 832-HELP (4357).

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of pesticide application.

**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.



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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 **4 hours**. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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  $\geq 14$  mils, or natural rubber  $\geq 14$  mils, or neoprene rubber  $\geq 14$  mils, or nitrile rubber  $\geq 14$  mils.
- shoes plus socks.

Ensure spray drift to non-target species does not occur.

**DO NOT** apply **Beyond® herbicide** in any manner not specifically described in this label.

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

When applied by either ground or air, **Beyond** spray drift or other indirect contact may injure sensitive crops, including non-imidazolinone tolerant wheat, sunflower or canola, sugarbeets, and leafy vegetables.

Spray equipment used for **Beyond** application must be drained and thoroughly cleaned with water before being used to apply other products.

Observe all cautions and limitations on this label and on the labels of products used in combination with **Beyond**. **DO NOT** use **Beyond** other than in accordance with the instructions set forth on this label. Keep containers closed to avoid spills and contamination.

### STORAGE AND DISPOSAL

#### PROHIBITIONS:

- KEEP FROM FREEZING.
- **DO NOT** store below 32° F.
- **DO NOT** contaminate water, food or feed by storage or disposal.

**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:** 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.

### I. GENERAL INFORMATION

The mode of weed killing activity involves uptake of **Beyond** by foliage and/or weed roots and rapid translocation to the growing points. After **Beyond** application, susceptible weeds may show yellowing and weed growth will stop. Susceptible weeds stop growing and either die or are not competitive with the crop. Adequate soil moisture is important for optimum **Beyond** activity. When adequate soil moisture is present, **Beyond** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil. A timely cultivation after a **Beyond** application may improve general weed control.

When organophosphate (such as Lorsban® insecticide) or carbamate insecticides (such as Furadan™ insecticide) are tank-mixed with **Beyond**, temporary injury may result to the treated crop. Separate organophosphate and **Beyond** application by at least 7 days to reduce potential for injury.

**DO NOT** tank-mix organophosphate or carbamate insecticides with **Beyond** on **CLEARFIELD®** crops unless otherwise specified in writing by BASF.

Use of **Beyond** is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following **Beyond** applications. These effects can be more pronounced if crops are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within 1-2 weeks.

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**Replanting:** If replanting is necessary in a field previously treated with **Beyond® herbicide**, the field may be replanted to **CLEARFIELD® Canola**, **CLEARFIELD® Corn**, **CLEARFIELD® Sunflowers**, **CLEARFIELD® Wheat**, edible legumes, or soybeans. Rework the soil no deeper than 2 inches. **DO NOT** apply a second treatment of **Beyond**. **DO NOT** apply **Pursuit® herbicide**, **Raptor**, or **Pursuit Plus EC herbicide** if soybeans are re-planted.

Naturally occurring biotypes<sup>1</sup> of some of the weeds listed on this label may not be effectively controlled by this and/or other products with either the ALS/AHAS enzyme inhibiting mode of action. Other herbicides with the ALS/AHAS enzyme inhibiting mode of action include the sulfonylureas (e.g., **Amber®**, **Express®**, **Everest®**, **Finesse®**, **Glean®**, **Peak®**, **Rave™**, **Accent®**, **Ally®**, **Basis®**, **Classic®**, **Exceed®**, **Harmony® Extra**, **Maverick®**, **Permit®**, **Pinnacle®**, **Silverado® herbicides**, etc.), imidazolinones (e.g., **Pursuit**, **Scepter®**, **Cadre®** and **Lightning® herbicides**), the sulfonamides (e.g., **Hornet® herbicide**, etc.) and the pyrimidyl benzoates (e.g., **Staple® herbicide**, etc.). If naturally occurring ALS/AHAS resistant biotypes are present in a field, **Beyond** and/or any other ALS/AHAS enzyme inhibiting mode of action herbicide should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

<sup>1</sup> A weed biotype is a naturally occurring plant within a given species that has a slightly different, but distinct, genetic makeup from other plants.

**Beyond** is very active against many broadleaf and grass weed species. For long term weed management, use two herbicides with different modes of action to reduce the potential for weed resistance. Crop (and herbicide) rotation is also effective in managing weed resistance where herbicides of different modes of action are used. Tillage, where practical (such as in fallow production, or prior to planting) is also effective in controlling weeds to minimize resistance development. Additionally, a burndown herbicide during fallow or prior to planting is also effective in reducing weed resistance development.

**Beyond** has no preharvest interval (PHI) for any crop.

## II. MIXING INSTRUCTIONS

POSTEMERGENCE APPLICATIONS OF **BEYOND** REQUIRE THE ADDITION OF AN ADJUVANT **AND** A NITROGEN FERTILIZER SOLUTION.

### I. ADJUVANTS

**CROP OIL CONCENTRATE:** A petroleum or vegetable seed based crop oil concentrate may be used. A methylated seed oil is recommended when weeds are under moisture or temperature stress. Use methylated seed oils or crop oil con-

centrate at a rate of 1-2 gallons per 100 gallons of spray solution.

**OR**

**SURFACTANTS:** Use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 1 quart per 100 gallons of spray solution (0.25%vol/vol). An organo-silicone surfactant may be used in place of a non-ionic surfactant.

**AND**

### II. NITROGEN FERTILIZER

Recommended nitrogen based fertilizers include liquid fertilizers (such as liquid ammonium sulfate, 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

When weeds are under moisture or temperature stress, using higher nitrogen fertilizer rates (UAN at 5% v/v or 20 lbs AMS/100 gallons) may improve weed control. Additional crop response may be observed when higher fertilizer rates are used.

### DO NOT USE CROP OIL CONCENTRATE OR METHYLATED SEED OIL WITH BEYOND IN CLEARFIELD® WHEAT.

Fill the spray tank one-half to three-quarters full with clean water. Use a calibrated measuring device to measure the required amount of **Beyond**. Add **Beyond** to the spray tank while agitating. Add adjuvants and fill the remainder of the tank with water.

**NOTE:** Nitrogen fertilizer is not required when applied in use areas south of Interstate Highway 40, except in the states of Texas, New Mexico, Oklahoma, Arizona, and California.

**NOTE:** Do not apply **Beyond** in liquid fertilizer as the carrier (except to **Clearfield®** winter wheat).

### LIQUID FERTILIZER AS A CARRIER (Clearfield® winter wheat only)

**DO NOT** apply **Beyond** in liquid fertilizer concentrate except **Beyond** may be applied to **CLEARFIELD®** winter wheat in a water/liquid fertilizer solution with at least 50% water. Add a non-ionic surfactant at the rate of 1 quart per 100 gallons of spray solution (0.25%). Some crop leaf burn from the fertilizer in the solution may occur from the fertilizer application.

**NOTE: Additional MIXING INSTRUCTIONS for EDIBLE LEGUMES (Excluding English Peas, Lima Beans (succulent) and Snap Beans).**

**Beyond® herbicide** applications may be made to dry edible legumes either with, or without the addi-

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tion of a fertilizer. The addition of nitrogen-based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of edible legume response. When nitrogen is added to the mixture, add **Basagran® herbicide** as a tank mixture partner at a rate of 6 to 16 oz/A to minimize crop response. For applications to dry peas, always add **Basagran** to the spray mixture. For enhanced grass activity, add a crop oil or methylated seed oil instead of surfactant. Always add **Basagran** at the rates indicated above when crop oils and/or fertilizer are used in the spray mixture. **Basagran** applications at rates higher than 16 oz/A may reduce grass control.

**NOTE: See DIRECTIONS FOR USE for ENGLISH PEAS, LIMA BEANS (Succulent) and SNAP BEANS in Section IV. APPLICATION INSTRUCTIONS, for additional mixing instructions.**

### TANK MIX COMBINATIONS WITH OTHER HERBICIDES

If other herbicides or other spray tank components are tank-mixed with **Beyond**, while agitating, add components in the following order and thoroughly mix after adding each component:

- 1) Fill spray tank 1/2 to 3/4 full with clean water.
- 2) Add soluble packet products and thoroughly mix.
- 3) Add WP (wetable powder), DG (dispersible granule), DF (dry flowable) or liquid flowable formulations not in soluble packets.
- 4) Add **Beyond** and thoroughly mix.
- 5) Add other aqueous solution products.
- 6) Add EC (emulsifiable concentrate) products.
- 7) Add surfactant or crop oil to the spray tank.
- 8) Add nitrogen fertilizer solution.
- 9) While agitating, fill the remainder of the tank with water.

To avoid injury to sensitive crops, spray equipment used for **Beyond** applications must be drained and thoroughly cleaned with water before being used to apply other products.

When **Beyond** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded. **Beyond** cannot be mixed with any product containing a label prohibiting such mixtures.

### III. SPRAYING INSTRUCTIONS

**DO NOT** apply when wind conditions may result in drift, when temperature inversion conditions exist, or when spray may be carried to sensitive crops.

Sensitive crops include but are not limited to leafy vegetables and sugarbeet.

### GROUND APPLICATION

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. A spray pressure of 20 to 40 psi is recommended.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying **Beyond** to minimum or no-till crops. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Adjust the boom height to ensure proper coverage of weed foliage (according to the manufacturer's recommendation). Use flat-fan nozzle tips or similar appropriate nozzle tips to ensure adequate coverage.

Avoid overlaps when spraying.

### GROUND APPLICATION WITH A LOW-VOLUME SPRAYER

**Beyond** may be applied with a low-volume (Spray-Coupe®-type) sprayer. When applying **Beyond** with a low-volume sprayer, spray the weeds before they reach the maximum size listed in this label.

Adequate control of weeds is dependent upon good spray coverage of the weeds. The sprayer must be calibrated to deliver the recommended spray volume and pressure to ensure adequate spray coverage of the weeds.

When applying **Beyond** with a low-volume sprayer, apply a minimum of 10 gallons per acre of spray solution with a nozzle pressure between 40-60 psi for optimum coverage.

### AERIAL APPLICATION

**Beyond** may be applied by air to all crops listed on this label.

Uniformly apply with properly calibrated equipment in 5 or more gallons of water per acre. The addition of an adjuvant AND fertilizer solution are required for optimum weed control.

Non-uniform applications of **Beyond** through aerial equipment may increase **CLEARFIELD®** crop response, especially when applied to large slopes and hills. All risks associated with non-uniform applications shall be assumed by the user.

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.

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.

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public health uses or to applications using dry formulations.

1. The distance of the outermost 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.

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**).

### **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 2-10 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

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for threatened or endangered species, or non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Applicator is responsible for any loss or damage which results from spraying **Beyond® herbicide** in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

#### IV. APPLICATION INFORMATION

**Apply Beyond as a postemergence treatment when weeds are actively growing and before they exceed the maximum recommended size (see weed control tables following each crop).**

Delay application until the majority of the weeds are at the recommended growth stage. In general, **Beyond** should be applied when weeds are small and actively growing, however, delay application in seedling alfalfa and dry beans until minimum growth stages have occurred (refer to seedling alfalfa and dry bean sections).

An adjuvant (either a surfactant or a crop oil concentrate) and a nitrogen fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANT** section under **MIXING INSTRUCTIONS** for specific instructions.

When **Beyond** is applied postemergence, absorption will occur through both the roots and foliage. Susceptible weeds stop growing and either die or are not competitive with the crop. **Beyond** not only controls many existing broadleaf and grass weeds when applied postemergence, it also provides activity on susceptible weeds that may emerge shortly after application.

Weeds are most easily controlled when actively growing. Under conditions of cold temperatures (less than 40° F, maximum daytime temperatures), weed control may be less than optimal.

For maximum weed control, cultivate (where possible) 7 - 10 days following a postemergence **Beyond** application. This timely cultivation will enhance residual weed activity, especially under dry conditions.

**Beyond** should be applied a minimum of one hour before rainfall or overhead irrigation.

#### CLEARFIELD® CANOLA

#### DIRECTIONS FOR USE

**Beyond** is effective in controlling weeds in conservation tillage and conventional production systems. **Beyond** can be applied early postemergence in **CLEARFIELD® Canola** but before the bloom stage. Refer to the specific treatment under the **SPRAYING INSTRUCTIONS** section of the label.

#### USE RATE

Apply **Beyond** postemergence only at a rate of 0.031 lb imazamox a.e./acre (4 oz **Beyond** per acre). At this rate one gallon of **Beyond** will treat 32 acres of **CLEARFIELD® Canola**. It is recommended that a registered soil applied grass herbicide be used prior to use of **Beyond**.

A surfactant and a nitrogen fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANT** section under **MIXING INSTRUCTIONS** for specific instructions.

#### CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces of **Beyond**) during the growing season.

#### WEEDS CONTROLLED

**Beyond** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

##### Broadleaf Weeds Controlled by Beyond

	Maximum Weed Size (inches)
Beet, wild	3
Canola, volunteer (non-CLEARFIELD®)	3
Chickweed, common	3
Cocklebur, common	3
Jimsonweed	3
Flixweed	3
Lambsquarters, common	3 <sup>1</sup>
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Radish, wild	3
Shepherdspurse	3
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Tansymustard, green	3
Velvetleaf	3

<sup>1</sup> **Beyond** controls common lambsquarters at 4 oz/A east of the Rocky Mountains

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**Broadleaf Weeds Suppressed by Beyond® Herbicide**

	Maximum Weed Size (inches)
Buckwheat, wild	3
Flax	2
Knotweed, prostrate	3
Lettuce, miners	3
Morningglory	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Rocket, London	3
Rocket, Yellow	3
Spurge, prostrate	3
Thistle, Russian (non-ALS resistant)	3

**Grass Weeds Controlled by Beyond**

	Weed Size
	Number of Leaves (maximum tillers)
Blackgrass	1-4 (1)
Brome	
Downy	1-5 (2)
Cheat	1-5 (2)
Japanese	1-5 (2)
Canarygrass, littleseed	1-5 (2)
Cereals, volunteer	
Barley	1-5 (1)
Oat	1-5 (1)
Wheat (non-CLEARFIELD®)	1-4 (1)
Darnel, Persian	1-5 (2)
Foxtail	
Giant	1-6 (2)
Green	1-4 (1)
Yellow	1-4 (1)
Jointed goatgrass	1-6 (2)
Oats, wild	1-5 (2)
Ryegrass, Italian	1-4 (1)
Rye, feral or cereal	1-4 (1)
Shattercane	1-6 (2)

**Grass Weeds Suppressed by Beyond Applications**

	Weed Size
	Number of Leaves (maximum tillers)
Barnyardgrass	1-4 (1)
Corn, volunteer	1-4 (1)
Crabgrass, large	1-4 (1)

**SPECIFIC WEED PROBLEMS**

**Canada Thistle:** For enhanced activity of Canada thistle, add Stinger™ herbicide to the tank mixture. Apply to Canada thistle in the rosette stage.

**CLEARFIELD® SUNFLOWER**

**DIRECTIONS FOR USE**

**Beyond® herbicide** is effective in controlling weeds in conservation and conventional tillage production systems. **Beyond** can be applied early postemergence in **CLEARFIELD®** Sunflower (imidazolinone tolerant sunflower) varieties. Apply only on selected sunflower varieties labeled as "**CLEARFIELD®**" and warranted by the seed supplier to possess tolerance to direct application of **Beyond**. **DO NOT** apply **Beyond** to sunflower varieties which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or BASF to obtain information regarding **CLEARFIELD®** sunflower varieties. Refer to the specific treatment under the **SPRAYING INSTRUCTIONS** section of the label.

**Apply Beyond as an early postemergence treatment when weeds are actively growing and before broadleaf weeds exceed a height of 3 inches and grasses exceed 4-5 leaves** (unless otherwise indicated, refer to weed control tables for specific weed sizes). Under conditions of cold temperatures (less than 50° F, maximum daytime temperatures), weed control may be less than optimal. Make application when the majority of weeds are at the recommended growth stage.

When adequate soil moisture is present, **Beyond** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Occasionally, reduction in plant height or temporary yellowing of crop plants may occur following **Beyond** applications. These effects can be more pronounced if crops are growing under stressful environmental conditions. These effects are temporary. Normal growth and appearance should resume within 1 to 2 weeks.

For best weed control and to provide the highest crop competitive advantage, apply **Beyond** to actively growing **CLEARFIELD®** sunflowers. Plant a locally adapted **CLEARFIELD®** sunflower variety at the normal seeding rate for your geography. Apply to sunflower after the first pair of true leaves have unfolded and up to and including the fourth pair of leaves are unfolded (2-8 leaf stage).

**BEYOND APPLICATION TIMING - SUNFLOWER**

Apply **Beyond** at the following crop and weed stages of growth:

CLEARFIELD SUNFLOWERS	2-8 LEAF STAGE
Broadleaf weeds	Refer to weed control tables for specific weed sizes.
Grass weeds	

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## USE RATE

Apply **Beyond** postemergence only at a rate of 0.031 lb imazamox a.e./acre (4 oz. **Beyond** per acre). At this rate one gallon of **Beyond** will treat 32 acres of **CLEARFIELD\*** Sunflowers. It is recommended that a registered soil-applied grass herbicide like **Prowl® 3.3 EC herbicide** be used prior to use of **Beyond**.

A nonionic surfactant and nitrogen-based fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANTS** section under **MIXING INSTRUCTIONS** for specific instructions.

## CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces **Beyond** per acre) during the growing season.

<b>Broadleaf Weeds Controlled by Beyond Alone, or in a Sequential<sup>1</sup> Program</b>		
<b>Application Rate</b>		
	<b>Beyond Postemergence Alone</b>	<b>Prowl® 3.3 EC Herbicide Soil Applied Followed by Beyond<sup>1</sup> Postemergence</b>
	<b>4 oz/A</b>	<b>4 oz/A</b>
	<b>Maximum Weed Size (Inches)</b>	
Beet, wild	3	3
Chickweed, common	3	3-5
Cocklebur, common	3	3
Jimsonweed	3	3-6
Kochia <sup>2</sup>		1-4
Lambsquarters, common	3	3-5
Marshelder	4	4
Mustard spp.	2-8	2-8
Nightshade,		
Black	2-5	2-5
Eastern black	2-5	2-5
Hairy	2-5	2-5
Pigweed,		
Redroot	3	3-8
Smooth	3	3-8
Spiny	3	3-5
Puncturevine		1-3
Purslane, common		1-3
Radish, wild	3	3-4
Smartweed,		
Ladysthumb	2-5	2-5
Pennsylvania	2-5	2-5
Spurge, prostrate		3-4
Sunflower, wild or volunteer (non-CLEARFIELD*)	2-6	2-6

<b>Broadleaf Weeds Controlled by Beyond Alone, or in a Sequential<sup>1</sup> Program (Cont.)</b>		
<b>Application Rate</b>		
	<b>Beyond Postemergence Alone</b>	<b>Prowl 3.3 EC Soil Applied Followed by Beyond<sup>1</sup> Postemergence</b>
	<b>4 oz/A</b>	<b>4 oz/A</b>
	<b>Maximum Weed Size (Inches)</b>	
Tansymustard	3	3
Velvetleaf	3	3-8

<sup>1</sup> Soil-applied grass herbicide such as **Prowl** is followed by a postemergence application of **Beyond** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> Control of light to moderate populations of ALS susceptible biotypes only.

<b>Broadleaf Weeds Suppressed by Beyond Alone, or in a Sequential<sup>1</sup> Program</b>		
<b>Application Rate</b>		
	<b>Beyond Postemergence Alone</b>	<b>Prowl 3.3 EC Soil Applied Followed by Beyond<sup>1</sup> Postemergence</b>
	<b>4 oz/A</b>	<b>4 oz/A</b>
	<b>Maximum Weed Size (Inches)</b>	
Bindweed,		
Field (seedling)	2-4	2-4
Hedge (seedling)	2-4	2-4
Buckwheat, wild	1-3	1-3
Flax	2	2
Knotweed, prostrate	3	3
Lettuce, miners	3	3
Mallow, Venice		1-4
Morningglory,		
Entireleaf	3	3
Ivyleaf	3	3
Smallflower	3	3
Tall	3	3
Rocket, London	3	3
Rocket, Yellow	3	3
Spurge, prostrate	3	
Sowthistle, annual	2-4	2-4
Thistle, Canada	2-5	2-5
Thistle, Russian	3	3
(non-ALS resistant) <sup>2</sup>		

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Beyond** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> Control of light to moderate populations of ALS susceptible biotypes only.

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**Grass Weeds Controlled by Beyond® Herbicide Alone, or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Beyond Postemergence Alone	Prowl® 3.3 EC Herbicide Soil Applied Followed by Beyond <sup>1</sup> Postemergence
	4 oz/A	4 oz/A
Number of Leaves (maximum tillers)		
Barley, wild	2-4	2-4
Barnyardgrass	3 <sup>2</sup>	3-5
Blackgrass	1-4 (1)	1-4 (1)
Brome,		
Downy	1-5 (2)	1-5 (2)
Cheat	1-5 (2)	1-5 (2)
Japanese	1-5 (2)	1-5 (2)
Canarygrass, littleseed	1-5 (2)	1-5 (2)
Crabgrass,		
Large		1-4
Smooth		1-4
Cupgrass, woolly <sup>3</sup>		1-4
Darnel, Persian	1-5 (2)	1-5 (2)
Foxtail,		
Giant	1-6 (2)	1-6 (2)
Green	1-6 (1)	1-6 (1)
Yellow	1-6 (1)	1-6 (1)
Goosegrass		1-4 (1)
Goatgrass, jointed	1-5 (2)	1-5 (2)
Millet, wild proso	2-4 <sup>2</sup>	2-4
Oats, wild	1-5 (2)	1-5 (2)
Panicum,		
Fall	1-5	1-5
Texas		1-5
Sandbur, field <sup>3</sup>		2-5
Shattercane	2-8	2-8
Signalgrass, broadleaf	2-5 <sup>2</sup>	2-5
Stinkgrass		2-4
Volunteer cereals (non-CLEARFIELD®)	1-6 (3)	1-6 (3)
Witchgrass		2-5

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a post-emergence application of **Beyond** at a broadcast rate of 4 fluid ounces per acre.

<sup>2</sup> Control of light to moderate populations only. For control of heavier populations use a SEQUENTIAL APPLICATION with a soil-applied grass herbicide as described above.

<sup>3</sup> For control a dinitroaniline (DNA) herbicide such as **Prowl 3.3 EC** must be soil-applied at a full-labeled rate.

**Grass Weeds Suppressed by Beyond Alone, or in a Sequential<sup>1</sup> Program**

	Application Rate	
	Beyond Postemergence Alone	Prowl 3.3 EC Soil Applied Followed by Beyond <sup>1</sup> Postemergence
	4 oz/A	4 oz/A
Number of Leaves (maximum tillers)		
Crabgrass,		
Large	1-4 (1)	
Smooth	1-4 (1)	
Cupgrass, woolly	1-3	
Goosegrass	1-3	
Itchgrass		2-5
Quackgrass		4-8
Stinkgrass	2-4	
<b>SEDGES</b>		
Nutsedge,		
Purple	1-3	1-3
Yellow	1-3	1-3

<sup>1</sup> Soil-applied grass herbicide such as **Prowl 3.3 EC** is followed by a postemergence application of **Beyond** at a broadcast rate of 4 fluid ounces per acre.

**CLEARFIELD® SPRING WHEAT**

**DIRECTIONS FOR USE**

**Beyond** can be applied postemergence on **CLEARFIELD®** Wheat (imidazolinone tolerant wheat) varieties. Apply only on selected spring wheat varieties labeled as "**CLEARFIELD®**" and warranted by the seed supplier to possess tolerance to direct application of certain imidazolinone herbicides. **DO NOT** apply **Beyond** to wheat varieties which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or BASF to obtain information regarding **CLEARFIELD®** wheat varieties.

**Apply Beyond as an early postemergence treatment when weeds are actively growing and before broadleaf weeds exceed a height of 3 inches and grasses exceed 4-5 leaves** (unless otherwise indicated). Under conditions of cold temperatures (less than 40° F maximum daytime temperatures), weed control may be less than optimal. A thin stand of wheat may result in unacceptable weed control. **Beyond** is effective in controlling weeds in conservation tillage and conventional tillage wheat production systems. Delay application until the majority of the weeds are at the recommended growth stage. When a mixture of grasses and broadleaf weeds are present, time the application to the grass weeds for optimum control.



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When adequate soil moisture is present, **Beyond® herbicide** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Occasionally, reduction in plant height or temporary yellowing of crop plants may occur following **Beyond** applications. These effects can be more pronounced in spray overlap areas and/or if crops are growing under stressful environmental conditions (such as, but not limited to, drought, excessive moisture, improper fertility, improper varietal adaptation, poor planting conditions, etc.). To avoid possible crop injury, do not apply **Beyond** to **CLEARFIELD®** wheat when extreme cold temperatures (less than 40° F maximum daytime temperatures) are expected within one week of application. Crop response associated with stress conditions and overlaps shall be the responsibility of the user.

Weed control is optimized when **Beyond** is applied to actively growing wheat. Plant a locally adapted **CLEARFIELD®** variety at the normal seeding rate for your geography. Apply to wheat after tiller initiation has begun and prior to the jointing stage of growth (and when the weeds are at the appropriate size - see **WEEDS CONTROLLED** tables).

**BEYOND APPLICATION TIMING**

Apply **Beyond** at the following crop and weed stages of growth:

<b>CLEARFIELD® SPRING WHEAT</b>	<b>4-LEAF TO PRIOR TO JOINT</b>
Broadleaf weeds	Refer to weed control tables for specific weed sizes.
Grass weeds	

**USE RATE**

**SPRING WHEAT:**

APPLY 0.031 lb imazamox a.e./acre (4 FLUID OUNCES OF **BEYOND** PER ACRE). See **WEEDS CONTROLLED** section for detailed use rate recommendations.

A surfactant **and** nitrogen based fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANTS** section under **MIXING INSTRUCTIONS** for specific instructions.

**CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS**

**DO NOT** apply more than 0.031 lb imazamox a.e./acre (4 ounces of **Beyond** per acre) during the growing season.

There are no restrictions following an application of **Beyond** for feeding or grazing of wheat forage and hay.

**WEEDS CONTROLLED - SPRING WHEAT**

**Beyond** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

<b>Broadleaf Weeds Controlled by Beyond (4 Ounces per Acre)</b>	
<b>Weed Size</b>	
<b>Maximum Size (Inches)</b>	
Canola, volunteer	5
Chickweed, common	3
Cocklebur, common	3
Flixweed	3
Henbit	3
Knotweed, prostrate	3
Lambsquarters, common <sup>1</sup>	1
Mallow,	
Common	3
Venice	1
Mustard,	
Tumble	3
Wild	4
Black	4
Blue	4
Nightshade,	
Black	5
Eastern black	5
Hairy	5
Pennycress, field	3
Pigweed,	
Redroot	5
Smooth	4
Spiny	3
Purslane, common	3
Radish, wild	3
Rocket, London	5
Rocket, yellow	5
Shepherdspurse	5
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3
Tansymustard, green	4
Thistle, Russian (non-ALS resistant)	3
Velvetleaf	3

<sup>1</sup> **Beyond** provides suppression of common lambsquarters East of the Rocky Mountains.

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**Broadleaf Weeds Suppressed by Beyond® Herbicide Applications (4 Ounces per Acre)**

	Weed Size	
	Maximum Size (Inches)	
Bedstraw	3	
Buckwheat, wild <sup>1</sup>	3	
Dandelion	3	
Ragweed,		
Common	3	
Giant	3	
Thistle, Canada	3	

<sup>1</sup> See **SPECIFIC WEED PROBLEMS** section for more information.

**Grass Weeds Controlled by Beyond - Spring Wheat (4 Ounces per Acre)**

	Weed Size	
	Number of Leaves (maximum tillers)	
Barnyardgrass	1-5 (1)	
Brome,		
California	1-5 (2)	
Downy	1-5 (2)	
Cheat	1-5 (2)	
Japanese	1-5 (2)	
Canarygrass, littleseed	1-5 (2)	
Cereals, volunteer		
Barley	1-6 (1)	
Oat	1-6 (1)	
Wheat (non-CLEARFIELD®)	1-4 (1)	
Corn, volunteer (non-CLEARFIELD®)	1-4	
Crabgrass, large	1-4 (1)	
Darnel, Persian	1-5 (2)	
Foxtail,		
Giant	1-6 (2)	
Green	1-4 (1)	
Yellow	1-4 (1)	
Jointed goatgrass	1-5 (2)	
Oats, wild <sup>1</sup>	1-5 (2)	
Rescuegrass	1-4 (1)	
Ryegrass, Italian <sup>1</sup>	1-4 (1)	
Rye, feral or cereal <sup>1</sup>	1-4 (1)	

<sup>1</sup> See **SPECIFIC WEED PROBLEMS** section.

**SPECIFIC WEED PROBLEMS**

**Feral Rye (cereal, volunteer rye):** Beyond controls emerged feral rye only. Apply to feral rye before the first tiller forms. Once feral rye develops tillers, control is significantly reduced.

**Italian Ryegrass:** Beyond controls emerged Italian Ryegrass only. Under favorable growing conditions, ryegrass may germinate over several weeks.

**Kochia:** Naturally occurring ALS/AHAS resistant biotypes of kochia are common in wheat fields. In many cases, a tank mixture with Beyond® herbicide will be required for acceptable control. Apply Beyond in a tank mixture with a herbicide(s) recommended to control on kochia (e.g. Clarity® herbicide + 2,4-D). Apply to kochia 2 inches in size or less.

**Wild Buckwheat:** For enhanced control of wild buckwheat, add Starane® herbicide or Clarity to the tank mixture. Apply to wild buckwheat with no more than 2 true leaves.

**Wild Oats:** Beyond controls emerged wild oats only. Under favorable growing conditions, wild oats may germinate over several weeks. Beyond does not provide residual control of wild oats.

**TANK MIX HERBICIDE COMBINATIONS WITH BEYOND**

Recommended tank mixes for postemergence applications of Beyond on CLEARFIELD® wheat varieties are the following herbicides:

<b>Banvel®</b>	<b>Clarity®</b>
Bronate™	Curtail® M
(bromoxynil +	2,4-D Ester
MCPA)	MCPA
Buctril®	Starane®

Limit bromoxynil applications (Bronate or Buctril) to 0.5 lb/acre of active ingredient when tankmixed with Beyond.

When broadleaf herbicides are tankmixed with Beyond, there may be some reduction in weed control, particularly grass weeds.

**ALS inhibiting herbicides such as Ally®, Amber®, Everest®, Finesse®, Express®, Harmony® Extra, Maverick® and Silverado® herbicides should not be tankmixed with Beyond. Beyond tankmixes with ALS inhibiting herbicides may result in unacceptable crop response.**

When Beyond is used in combination with another herbicide, refer to the respective label for rates, methods and proper timing of application, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label use directions and precautions.

**CLEARFIELD® WINTER WHEAT**

**DIRECTIONS FOR USE**

Beyond can be applied postemergence on CLEARFIELD® Wheat (imidazolinone tolerant wheat) varieties. Apply only on selected winter wheat varieties labeled as "CLEARFIELD" and warranted by the seed supplier to possess tolerance to direct application of certain imidazolinone

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herbicides. **DO NOT** apply **Beyond®** herbicide to wheat varieties which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or BASF to obtain information regarding **CLEARFIELD®** wheat varieties.

**Apply Beyond as an early postemergence treatment when weeds are actively growing and before broadleaf weeds exceed a height of 3 inches and grasses exceed 4-5 leaves** (unless otherwise indicated). Under conditions of cold temperatures (less than 40° F, maximum daytime temperatures), weed control may be less than optimal. A thin stand of wheat may result in unacceptable weed control. **Beyond** is effective in controlling weeds in conservation tillage and conventional tillage wheat production systems. **Beyond** can be applied in the fall/winter or spring for winter or spring annual weed control, respectively. Delay application until the majority of the weeds are at the recommended growth stage. When a mixture of grasses and broadleaf weeds are present, time the application to the grass weeds for optimum control.

When adequate soil moisture is present, **Beyond** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Occasionally, reduction in plant height or temporary yellowing of crop plants may occur following **Beyond** applications. These effects can be more pronounced in spray overlap areas and/or if crops are growing under stressful environmental conditions (such as, but not limited to, drought, excessive moisture, improper fertility, improper varietal adaptation, poor planting conditions, etc.). To avoid possible crop injury, do not apply **Beyond** to **CLEARFIELD®** wheat when extreme cold temperatures (less than 40° F, maximum daytime temperatures) are expected within one week of application. Crop response associated with stress conditions and overlaps shall be the responsibility of the user.

Weed control is optimized when **Beyond** is applied to actively growing wheat. Plant a locally adapted **CLEARFIELD®** variety at the normal seeding rate for your geography. Apply to wheat after tiller initiation has begun and prior to the jointing stage of growth (and when the weeds are at the appropriate size - see **WEEDS CONTROLLED** tables).

## BEYOND APPLICATION TIMING - WINTER WHEAT

Apply **Beyond** at the following crop and weed stages of growth:

CLEARFIELD® WINTER WHEAT	AFTER TILLER INITIATION AND PRIOR TO JOINT
Broadleaf weeds	Refer to weed control tables for specific weed sizes.
Grass weeds	

## USE RATE

### WINTER WHEAT:

APPLY 0.031-0.047 LB IMAZAMOX A.E./A (4-6 FLUID OUNCES OF **BEYOND** PER ACRE). See **WEEDS CONTROLLED** section for detailed use rate recommendations.

A surfactant and nitrogen-based fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANTS** section under **MIXING INSTRUCTIONS** for specific instructions.

## CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

**DO NOT** apply more than 0.062 lb imazamox a.e./acre (8 ounces of **Beyond** per acre) during the growing season.

There are no restrictions following an application of **Beyond** for feeding or grazing of wheat forage and hay.

Application of **Beyond** to weeds, which have been grazed, may result in reduced weed control. For optimum weed control, allow a period of 7 days between the end of grazing and **Beyond** application for weed regrowth to occur. Under cold conditions, wait until new growth of weeds is evident before applying **Beyond** in fields which have been grazed.

## WEEDS CONTROLLED - WINTER WHEAT

**Beyond** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

Broadleaf Weeds Controlled by Beyond		
	Application Rate	Weed Size
	Ounces/Acre	Maximum Size (Inches)
Wild beet	4-6	3
Canola, volunteer	4-6	5
Chickweed, common	4-6	3
Cocklebur, common	4-6	3
Filaree,		
Redstem	5-6	3
Whitstem	5-6	3
Flixweed	4-6	3

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**Broadleaf Weeds Controlled by Beyond® Herbicide (Cont.)**

	Application Rate	Weed Size
	Ounces/Acre	Maximum Size (Inches)
Henbit	5-6	3
Knotweed, prostrate	5-6	3
Lambsquarters, common	4-6 <sup>1</sup>	1
Lettuce, miners	5-6	3
Jimsonweed	4-6	3
Mallow,		
Common	5-6	3
Venice	5-6	1
Morningglory,		
Entireleaf	5-6	3
Ivyleaf	5-6	3
Smallflower	5-6	3
Tail	5-6	3
Mustard,		
Tumble	4-6	3
Wild	4-6	4
Black	4-6	4
Blue	4-6	4
Nightshade,		
Black	4-6	5
Eastern black	4-6	5
Hairy	4-6	5
Pennycress, field	4-6	3
Pigweed,		
Redroot	4-6	5
Smooth	4-6	4
Spiny	4-6	3
Purslane, common	4-6	3
Radish, wild	4-6	3
Rocket, London	5-6	5
Rocket, yellow	5-6	5
Shepherdspurse	4-6	5
Smartweed,		
Ladysthumb	4-6	3
Pennsylvania	4-6	3
Swamp	5-6	3
Spurge, prostrate	5-6	3
Tansymustard, green	4-6	4
Thistle, Russian (non-ALS resistant)	5-6	3
Velvetleaf	4-6	3

<sup>1</sup> **Beyond** controls common lambsquarters at 4 oz./A east of the Rocky Mountains. Apply 5-6 oz/A west of the Rocky Mountains.

**Broadleaf Weeds Suppressed by Beyond Applications**

	Application Rate	Weed Size
	Ounces/Acre	Maximum Size (Inches)
Bedstraw	5-6	3
Buckwheat, wild <sup>1</sup>	5-6	3
Dandelion	5-6	3
Fiddleneck	5-6	3
Primrose,		
Cutleaf	5-6	3
Evening	5-6	3
Ragweed,	5-6	
Common	5-6	3
Giant	5-6	3
Thistle, Canada	5-6	3

<sup>1</sup> See **SPECIFIC WEED PROBLEMS** section for more information.

**Grass Weeds Controlled by Beyond - Winter Wheat**

	Application Rate	Weed Size
	Ounces/Acre	Number of Leaves (maximum tillers)
Barnyardgrass	5-6	1-5 (1)
Brome,		
California	4-6	1-5 (2)
Downy	4-6	1-5 (2)
Cheat	4-6	1-5 (2)
Japanese	4-6	1-5 (2)
Canarygrass, littleseed	4-6	1-5 (2)
Cereals, volunteer		
Barley	4-6 <sup>1</sup>	1-6 (1)
Oat	4-6 <sup>1</sup>	1-6 (1)
Wheat (non-CLEARFIELD*)	4-6 <sup>1</sup>	1-4 (1)
Corn, volunteer (non-CLEARFIELD*)	4-6	1-4
Crabgrass, large	5-6	1-4 (1)
Darnel, Persian	4-6	1-5 (2)
Foxtail,		
Giant	4-6	1-6 (2)
Green	4-6	1-4 (1)
Yellow	4-6	1-4 (1)
Johnsongrass, seedling	5-6	1-5 (1)
Jointed goatgrass	4-6	1-5 (2)
Oats, wild <sup>1</sup>	4-6	1-5 (2)
Rescuegrass	4-6	1-4 (1)
Ryegrass, Italian <sup>1</sup>	4-6	1-4 (1)
Rye, feral or cereal <sup>1</sup>	4-6	1-4 (1)

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Grass Weeds Suppressed by Beyond® Herbicide Applications		
	Application Rate	Weed Size
	Ounces/Acre	Number of Leaves (maximum tillers)
<b>Brome,</b>		
California	4-6	6+ (3+)
Downy	4-6	6+ (3+)
Cheat	4-6	6+ (3+)
Japanese	4-6	6+ (3+)
Fescue, rattail	4-6	1-3
Johnsongrass, rhizome	6	1-5
Jointed goatgrass	4-6	6+(3+)
<b>Sedges</b>		
Purple	6	1-3
Yellow	6	1-3
Quackgrass	6	1-5

<sup>1</sup> See SPECIFIC WEED PROBLEMS section.

**Specific Weed Problems**

**Beyond** is most effective for grass control when applied in the fall. If summer annual broadleaf weeds germinate in the spring, (following a fall application of **Beyond**) a broadleaf herbicide may need to be applied. If the **Beyond** application is made in the spring, the broadleaf herbicide may be tank mixed with **Beyond**. For improved control of grasses such as feral rye, Italian ryegrass, and downy brome, use higher rates of nitrogen fertilizer up to 50% of the spray solution. Higher rates of nitrogen can improve grass weed control with **Beyond**, especially under drought stress conditions.

**Feral Rye (cereal, volunteer rye):** **Beyond** controls emerged feral rye only. Apply to feral rye before the first tiller forms. Once feral rye develops tillers, control is significantly reduced. If feral rye germinates in the fall, an application of **Beyond** in the fall will provide the best control. If feral rye germinates following an application of **Beyond** in the fall, a spring application may be necessary for control of subsequent germination flushes. **Beyond** only suppresses feral rye in Texas and Oklahoma.

**Italian Ryegrass:** **Beyond** controls emerged Italian Ryegrass only. Under favorable growing conditions, ryegrass may germinate over several weeks (especially in the Southern U.S.). **Beyond** does not provide residual control of Italian ryegrass. Due to the potential for multiple germination flushes, Italian ryegrass control in Oklahoma, Texas and New Mexico may not be satisfactory. Optimum application timing is to ryegrass with 3-4 leaves and before the first tiller. Weed control is reduced when tillers develop. In the Pacific Northwest a spring application of 6 oz/Acre of **Beyond** is recommended to achieve the most consistent control. If Italian ryegrass germinates following a fall appli-

cation, a spring application may be necessary. Apply the higher recommended rate when Italian ryegrass is at the maximum recommended size, or to heavy grass populations.

**Kochia:** Naturally occurring ALS/AHAS resistant biotypes of kochia are common in wheat fields. In many cases, a tank mixture with **Beyond** will be required for acceptable control. If **Beyond** is applied in the spring, apply **Beyond** in a tank mixture with a herbicide(s) recommended to control kochia (i.e. **Clarity**® herbicide + 2,4-D). Apply to kochia 2 inches in size or less.

**Wild Buckwheat:** For enhanced control of wild buckwheat, add Starane® herbicide or **Clarity** to the tank mixture. Apply to wild buckwheat with no more than 2 true leaves.

**Wild Oats:** **Beyond** controls emerged wild oats only. Under favorable growing conditions, wild oats may germinate over several weeks (especially in the Southern US). **Beyond** does not provide residual control of wild oats. Due to the potential for multiple germination flushes, wild oat control in Oklahoma, Texas and New Mexico may not be satisfactory.

**TANK MIX HERBICIDE COMBINATIONS WITH BEYOND**

**Recommended Tank Mixes For Postemergence Applications of Beyond on CLEARFIELD® Wheat Varieties are the following herbicides:**

<b>Banvel</b> ®	<b>Clarity</b> ®
Bronate™	Curtail® M
(bromoxynil + MCPA)	2,4-D Ester
Buctril®	MCPA
	Starane®

Limit bromoxynil applications (Bronate or Buctril) to 0.5 lb/acre of active ingredient when tankmixed with **Beyond**.

When broadleaf herbicides are tankmixed with **Beyond**, there may be some reduction in weed control, particularly grass weeds.

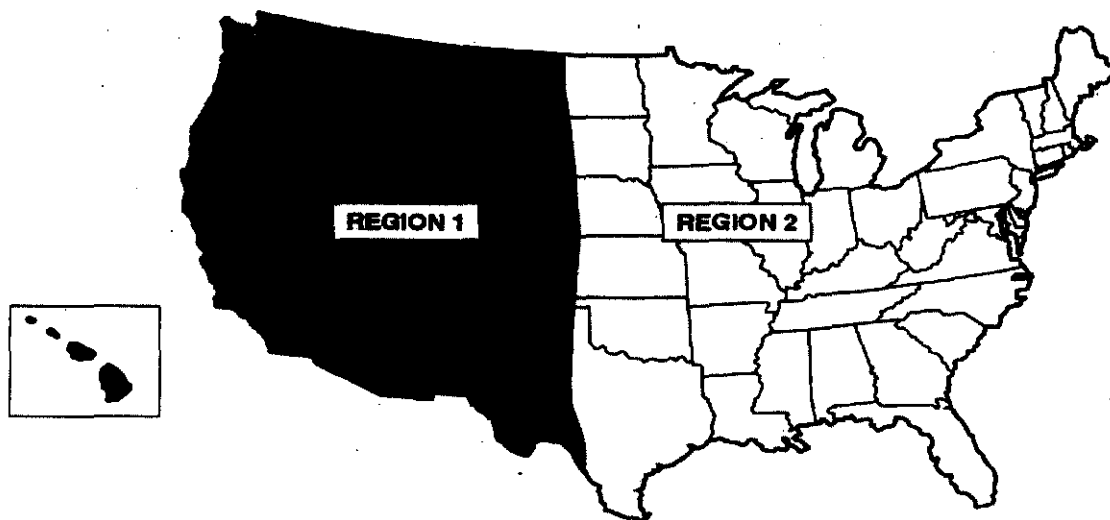
**Sulfonylurea herbicides such as Ally®, Amber®, Everest®, Finesse®, Express®, Harmony® Extra and Maverick® herbicides should not be tankmixed with Beyond. Beyond tankmixes with sulfonylurea herbicides may result in unacceptable crop response.**

When **Beyond** is used in combination with another herbicide, refer to the respective label for rates, methods and proper timing of application, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label use directions and precautions.

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## ROTATIONAL CROP RESTRICTIONS

Rotational crops may be planted after applying the recommended rate of **Beyond® herbicide** in the regions as indicated below.



**Region 1** consists of states and parts of states WEST of U.S. Highway 83 (Arizona, California, Hawaii, Idaho, Oregon, Washington, Utah, Nevada, New Mexico, Wyoming, Montana, Colorado, and western parts of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Texas).

**Region 2** consists of states and parts of states to the EAST of U.S. Highway 83 (Includes the eastern parts of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, and the states to the east of these states).

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### Rotational Interval (months) Following an Application of Beyond® herbicide

PLANT-BACK INTERVAL (MONTHS)	REGION 1	REGION 2
<b>ANYTIME</b>	<b>CLEARFIELD®</b> canola <b>CLEARFIELD®</b> wheat <b>CLEARFIELD®</b> sunflower Edible legumes soybeans	<b>CLEARFIELD®</b> canola <b>CLEARFIELD®</b> wheat <b>CLEARFIELD®</b> sunflower Edible legumes soybeans
<b>THREE MONTHS</b>	Alfalfa Wheat (non- <b>CLEARFIELD®</b> )	Alfalfa Wheat (non- <b>CLEARFIELD®</b> )
<b>FOUR MONTHS</b>	Rye	Barley Rye
<b>EIGHT AND ONE-HALF MONTHS</b>	Corn (field, pop, seed, sweet, <b>CLEARFIELD®</b> and non- <b>CLEARFIELD®</b> )	Corn (field, pop, seed, sweet, <b>CLEARFIELD®</b> and non- <b>CLEARFIELD®</b> )
<b>NINE MONTHS</b>	Barley <sup>1</sup> Cantaloupe Cotton Grain Sorghum Lettuce Millets Oat Onion	Peanut Pumpkin Rice Squash Sunflower Tobacco Watermelon
		Broccoli Cabbage Cantaloupe Carrot Cotton Cucumber Grain Sorghum Lettuce Millets Oat Onion
		Peanut Pepper Potato <sup>2</sup> Pumpkin Rice Squash Sunflower Tobacco Tomato Turnip Watermelon
<b>EIGHTEEN MONTHS</b>	Barley <sup>1</sup> Broccoli Cabbage Carrot Cucumber <b>All other crops not listed in the ROTATIONAL CROP restrictions.</b>	Pepper Potato Tomato Turnip <b>All other crops not listed in the ROTATIONAL CROP restrictions.</b>
		Canola Sugar beet <sup>3</sup> Table beet <sup>3</sup> <b>All other crops not listed in the ROTATIONAL CROPS restrictions.</b>
<b>TWENTY-SIX MONTHS</b>	Sugar beet <sup>4</sup> Condiment Mustard	Canola Table beet Sugar beet <sup>3</sup> Table beet <sup>3</sup>

<sup>1</sup> In **Region 1**, refer to the following table for rotational intervals for planting barley following applications of **Beyond**.

<sup>2</sup> In **Region 1**, refer to the following table for rotational intervals for planting potato following applications of **Beyond**.

<sup>3</sup> In **Region 2**, sugar beet and table beets can be planted eighteen months following an application of **Beyond** if the soil pH is uniformly 6.2 or greater. If the soil pH is less than 6.2, the rotational interval is 26 months. Sugar beet yields can be reduced when grown in soil conditions with a pH less than 6.2. If the soil is limed to adjust the soil pH, apply the lime at least 18 months prior to planting sugarbeet or other rotational crops under the 18 month rotational interval.

<sup>4</sup> For sugar beets grown in parts of Nebraska west of Highway 83 and Platte, Goshen and Laramie counties in Wyoming, follow the sugar beet rotational crop restrictions for **Region 2** for sprinkler irrigated fields only. If fields are dryland, flood or furrow irrigated, follow restrictions for **Region 1**. A minimum of 10 inches of overhead irrigation must be applied each season in order to qualify for **Region 2** guidelines.

When taking soil samples to determine soil pH, utilize a grid sampling technique, sampling to a depth of 3-4 inches.

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Barley Rotational Interval Based on pH, Moisture and Tillage (Region 1)		Moldboard plowing?	
		NO	YES
pH and Rainfall Requirements	>18" R+I AND pH >6.2	9 months	9 months
	<18" R+I OR pH <6.2	18 months	9 months

Potato Rotational Interval Based on pH and Moisture (Region 2)		
pH and Rainfall Requirements	>18" R+I AND pH >6.2	9 months
	<18" R+I OR pH <6.2	18 months

**R+I** = Rainfall and overhead irrigation from the time of **Beyond®** herbicide application to barley or potato planting. **Does not include furrow or flood irrigation.**

If the rainfall or pH requirements are not fully met, and barley is planted prior to 18 months, injury may be reduced by tillage, such as deep disking (greater than 6 inches deep) after crop harvest but prior to November 1.

**FURROW- AND FLOOD-IRRIGATED CROPS**

Following harvest of furrow- or flood-irrigated crops, the soil should be thoroughly mixed by plowing or deep disking in order to minimize the potential for herbicide carryover to the following crop.

Use of **Beyond** in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors, such as arid conditions, make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

GENERAL PRECAUTIONS
<p>In the event of a crop loss due to weather, edible legumes, <b>CLEARFIELD®</b> canola, <b>CLEARFIELD®</b> corn, <b>CLEARFIELD®</b> sunflowers, <b>CLEARFIELD®</b> wheat, or soybeans can be replanted. <b>DO NOT</b> make an additional application of <b>Beyond</b>.</p> <p>Application of products containing chlorimuron ethyl (<b>Classic®</b>, <b>Canopy®</b>, <b>Synchrony®</b>, <b>Gemini®</b>, <b>Lorox Plus®</b>, <b>Preview®</b> herbicides, etc.), metsulfuron-methyl (<b>Harmony® Extra</b>), flumetsulam (<b>Broadstrike® + Dual®</b>, <b>Broadstrike + Treflan®</b> herbicides), imazaquin (<b>Scepter®</b>, <b>Squadron®</b>, <b>Tri-Scept®</b>, <b>Scepter O.T.</b>, <b>Scepter 70 DG herbicides</b>) or imazethapyr (<b>Pursuit®</b>, <b>Pursuit DG</b>, <b>Pursuit Plus EC herbicides</b>) the same year as <b>Beyond</b> may increase the risk of injury to sensitive rotational crops. Consult all pertinent labels for recommended uses of these products in combinations.</p> <p>If arid conditions occur during the year of application, rotational crop injury may occur.</p>



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### DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on research and field use. 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, herbicide resistant weed populations, or the use of, or application of the product contrary to label instructions, all of which are beyond the control of BASF Corporation. All such risks shall be assumed by the user.

BASF MAKES THIS PRODUCT AVAILABLE TO THE USER AND/OR GROWER SOLELY TO THE EXTENT THAT THE BENEFIT AND UTILITY, IN THE SOLE OPINION OF THE USER AND/OR GROWER, OUTWEIGH THE EXTENT OF POTENTIAL INJURY ASSOCIATED WITH THE USE OF THIS PRODUCT. THE DECISION TO USE OR NOT TO USE THIS HERBICIDE MUST BE MADE BY EACH INDIVIDUAL **BEYOND** USER AND/OR GROWER ON THE BASIS OF POSSIBLE CROP INJURY FROM **BEYOND**, THE SEVERITY OF WEED INFESTATION, THE COST OF ALTERNATIVE WEED CONTROLS, AND OTHER FACTORS. BASF INTENDS THAT BECAUSE OF THE RISK OF FAILURE TO PERFORM OR CROP DAMAGE THAT ALL SUCH USE IS AT THE USER'S AND/OR GROWER'S RISK. BASF DISCLAIMS ANY LIABILITY FOR CLAIMS, CAUSES OF ACTION, FINES, PENALTIES, DAMAGES, INCLUDING CONSEQUENTIAL INCIDENTS AND DAMAGES, LOSSES, LIABILITIES, JUDGEMENTS, AND EXPENSES ARISING OUT OF OR RELATING TO INJURY TO PERSONS, CROPS, OR PROPERTY RESULTING FROM THE USE OF **BEYOND® HERBICIDE** ON EDIBLE LEGUMES CONTRARY TO THE LABEL INSTRUCTIONS.

BASF shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

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#### USES WITH OTHER PRODUCTS (TANK MIXES)

If this product is used in combination with any other product except as specifically recommended in writing by BASF, then BASF shall have no liability for any loss, damage or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by BASF, the liability of BASF shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF product in such combination use, and in any event shall be limited to return of the amount of the purchase price of the BASF product.

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Supersedes NVA 2004-04-191-0018

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



The Chemical Company

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

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NOV 19 2004

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

241-379

**Raptor**  
herbicide

**Supplemental  
Labeling**

EPA Reg. No. 241-379

Expires May 6, 2005

**For Postemergence Use in Snap Beans in Delaware, Idaho,  
Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, New  
York, Oregon, Pennsylvania, Virginia, Washington and  
Wisconsin Only**

**OBSERVE ALL PRECAUTIONARY STATEMENTS AND SPRAYING INFORMATION  
IN THE RAPTOR® HERBICIDE LEAFLET LABEL BEFORE USING. REFER TO THE  
RAPTOR LEAFLET LABEL FOR FIRST AID AND WORKER PROTECTION  
STANDARD REQUIREMENTS.**

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of pesticide application.

When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded. **Raptor** cannot be mixed with any product containing a label prohibiting such mixtures. Do not use **Raptor** other than in accordance with the instructions set forth on this label. Keep containers closed to avoid spills and contamination.

**DO NOT** apply to snap beans that have been seriously injured from applications of soil-applied herbicides such as Dual® Magnum, Eptam®, or Cobra® herbicides.

THIS PRODUCT WHEN USED ON SNAP BEANS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

#### **GENERAL PRECAUTIONS**

**DO NOT** make more than one application of **Raptor** per year.

Allow at least 30 days between application and harvest of snap beans

Only rotational crops harvested at maturity may be used for feed or food.

In the event of a crop loss due to weather, edible legumes, **CLEARFIELD\*** canola, **CLEARFIELD\*** wheat, or soybeans can be replanted. Do not make an additional application of **Raptor**.

If arid conditions occur during the year of application, rotational crop injury may occur.

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Ensure spray drift to non-target species does not occur.

**DO NOT** apply **Raptor**<sup>®</sup> herbicide in any manner not specifically described in this label.

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

When applied by either land or air, **Raptor** spray drift or other indirect contact may injure sensitive crops including non-imidazolinone tolerant wheat or canola, sugarbeets, and leafy vegetables.

Spray equipment used for **Raptor** application must be drained and thoroughly cleaned with water before being used to apply other products.

### DISCLAIMER

BASF MAKES THIS PRODUCT AVAILABLE TO THE USER AND/OR GROWER SOLELY TO THE EXTENT THAT THE BENEFIT AND UTILITY, IN THE SOLE OPINION OF THE USER AND/OR GROWER, OUTWEIGH THE EXTENT OF POTENTIAL INJURY ASSOCIATED WITH THE USE OF THIS PRODUCT. THE DECISION TO USE OR NOT TO USE THIS HERBICIDE MUST BE MADE BY EACH INDIVIDUAL **RAPTOR** USER AND/OR GROWER ON THE BASIS OF POSSIBLE CROP INJURY FROM **RAPTOR**, THE SEVERITY OF WEED INFESTATION, THE COST OF ALTERNATIVE WEED CONTROLS, AND OTHER FACTORS. BASF INTENDS THAT BECAUSE OF THE RISK OF FAILURE TO PERFORM OR CROP DAMAGE THAT ALL SUCH USE IS AT THE USER'S AND/OR GROWER'S RISK. BASF DISCLAIMS ANY LIABILITY FOR CLAIMS, CAUSES OF ACTION, FINES, PENALTIES, DAMAGES, INCLUDING CONSEQUENTIAL INCIDENTS AND DAMAGES, LOSSES, LIABILITIES, JUDGEMENTS, AND EXPENSES ARISING OUT OF OR RELATING TO INJURY TO PERSONS, CROPS, OR PROPERTY RESULTING FROM THE USE OF **RAPTOR** ON EDIBLE LEGUMES CONTRARY TO THE LABEL INSTRUCTIONS.

### GENERAL INFORMATION

Use **Raptor** **ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following **Raptor** applications in snap beans. These effects can be more pronounced if crops are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within days.

### APPLICATION INSTRUCTIONS

**Early Postemergence Applications:** Apply **Raptor** at the broadcast rate of 4 ounces per acre, tank mixed with **Basagran**<sup>®</sup> herbicide at 6 to 16 ounces per acre. When used in snap beans, **Raptor** must be applied with **Basagran** to minimize crop response. **Basagran** applications at rates higher than 16 ounces per acre may reduce grass control.

Apply to crop and weeds that are actively growing. Apply **Raptor + Basagran** postemergence to snap beans in the first to second trifoliolate leaf stage and weeds that are less than 3 inches tall. Applications before the first trifoliolate leaf stage may result in increased crop response. **DO NOT** apply **Raptor + Basagran** to snap beans during flowering.

For use in Delaware, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, New York, Pennsylvania, Virginia and Wisconsin, a non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

For use in Idaho, Oregon and Washington, a non-ionic surfactant and nitrogen fertilizer must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution. Alternatively, a crop oil

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concentrate (COC) or methylated seed oil (MSO) can be used. Use COC at a rate of 1 gallon per 100 gallons of spray solution. Use MSO at a rate of 1 - 2 gallons per 100 gallons of spray solution. Recommended nitrogen based fertilizers include liquid fertilizers such as 28-0-0, 32-0-0, or 10-34-0 at the rate of 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12 - 15 pounds per 100 gallons of spray solution.

**Raptor® herbicide** tank mixes with any pesticide other than **Basagran® herbicide** are not recommended. Certain insecticide and herbicide tank mixes with **Raptor** in snap beans have shown unacceptable crop response.

**Raptor** may be applied a minimum of one hour before rainfall or overhead irrigation.

**BROADLEAF WEEDS CONTROLLED BY RAPTOR**

<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Jimsonweed	3
Mustard,	
tumble	3
wild	3
black	3
Nightshade,	
black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

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### BROADLEAF WEEDS SUPPRESSED BY RAPTOR® HERBICIDE

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<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 – 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Buckwheat, wild	3
Cocklebur, common	3
Lambsquarters, common	3
Knotweed, prostrate	3
Kochia*	3
Lettuce, miners	3
Morningglory	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3
Smartweed	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

\*Raptor control non-ALS resistant kochia only.

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**GRASS WEEDS CONTROLLED BY RAPTOR® herbicide**

<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Barnyardgrass	3
Blackgrass	3
Brome,	
downy	3
cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD*)	3
Dandel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn*	2-8

\* Except imidazolinone tolerant corn

**GRASS WEEDS SUPPRESSED BY RAPTOR**

<b>Application Rate</b>	
<b>Raptor at 4 oz./A + Basagran at 6 - 16 oz./A</b>	
<b>Maximum Weed Size (inches)</b>	
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3
Sedges	
Purple	3
Yellow	3
Quackgrass	3

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## ROTATIONAL CROP RESTRICTIONS

See main **Raptor** label for rotational plant-back intervals following applications of **Raptor**.

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Supersedes NVA 2004-04-133-0093

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

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# Supplemental Labeling

EPA Reg. No. 241-379

## For Postemergence Use on English Peas in Delaware, Illinois, Maryland, Minnesota, New York and Wisconsin Only

**OBSERVE ALL PRECAUTIONARY STATEMENTS AND SPRAYING INFORMATION IN THE RAPTOR® HERBICIDE LEAFLET LABEL BEFORE USING. REFER TO THE RAPTOR LEAFLET LABEL FOR FIRST AID AND WORKER PROTECTION STANDARD REQUIREMENTS.**

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of pesticide application.

When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded. **Raptor** cannot be mixed with any product containing a label prohibiting such mixtures. Do not use **Raptor** other than in accordance with the instructions set forth on this label. The use of **Raptor** not consistent with this label may result in injury to crops. Keep containers closed to avoid spills and contamination.

THIS PRODUCT WHEN USED ON ENGLISH PEAS MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

### GENERAL PRECAUTIONS

In the event of a crop loss due to weather, edible legumes, **CLEARFIELD®** canola, **CLEARFIELD®** corn, **CLEARFIELD®** sunflowers, **CLEARFIELD®** wheat, or soybeans can be replanted. Do not make an additional application of **Raptor**.

If arid conditions occur during the year of application, rotational crop injury may occur.

Ensure spray drift to non-target species does not occur.

**DO NOT** apply **Raptor** in any manner not specifically described in this label.

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

When applied by either land or air, **Raptor** spray drift or other indirect contact may injure sensitive crops including non-imidazolinone tolerant wheat or canola, sugarbeets, and leafy vegetables.

Spray equipment used for **Raptor** application must be drained and thoroughly cleaned with water before being used to apply other products.

**DO NOT** make more than one application of **Raptor** per year.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

NOV 19 2004  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
241-379

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## DISCLAIMER

BASF MAKES THIS PRODUCT AVAILABLE TO THE USER AND/OR GROWER SOLELY TO THE EXTENT THAT THE BENEFIT AND UTILITY, IN THE SOLE OPINION OF THE USER AND/OR GROWER, OUTWEIGH THE EXTENT OF POTENTIAL INJURY ASSOCIATED WITH THE USE OF THIS PRODUCT. THE DECISION TO USE OR NOT TO USE THIS HERBICIDE MUST BE MADE BY EACH INDIVIDUAL **RAPTOR® HERBICIDE** USER AND/OR GROWER ON THE BASIS OF POSSIBLE CROP INJURY FROM **RAPTOR**, THE SEVERITY OF WEED INFESTATION, THE COST OF ALTERNATIVE WEED CONTROLS, AND OTHER FACTORS. BASF INTENDS THAT BECAUSE OF THE RISK OF FAILURE TO PERFORM OR CROP DAMAGE THAT ALL SUCH USE IS AT THE USER'S AND/OR GROWER'S RISK. BASF DISCLAIMS ANY LIABILITY FOR CLAIMS, CAUSES OF ACTION, FINES, PENALTIES, DAMAGES, INCLUDING CONSEQUENTIAL INCIDENTS AND DAMAGES, LOSSES, LIABILITIES, JUDGEMENTS, AND EXPENSES ARISING OUT OF OR RELATING TO INJURY TO PERSONS, CROPS, OR PROPERTY RESULTING FROM THE USE OF **RAPTOR** ON ENGLISH PEAS CONTRARY TO THE LABEL INSTRUCTIONS.

## GENERAL INFORMATION

Use **Raptor ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

Reduced crop growth, temporary yellowing, quality, yield and/or delayed maturity may result from a **Raptor** application to English peas. Since crop maturity may be delayed, timing of harvest may need to be adjusted accordingly. **DO NOT** apply **Raptor** if planting is delayed and a chance of frost prior to maturity is likely. Growers should check with the seed company regarding the safety of **Raptor** to their variety.

## APPLICATION INSTRUCTIONS

**Early Postemergence Applications:** Apply **Raptor** at the broadcast rate of 3 ounces per acre.

Application timing should be based on weed size and crop growth stage. Apply **Raptor** to crop and weeds that are actively growing.

Apply **Raptor** postemergence to English peas at least 3 inches in height but prior to 5 nodes before flowering. The use of trifluralin prior to a **Raptor** application may increase the likelihood and severity of crop injury.

A non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

The addition of a nitrogen based fertilizer such as ammonium sulfate or liquid fertilizers (such as 28-0-0) may improve weed control, but also increases the likelihood of English pea response. When nitrogen based fertilizer is added to the mixture, add **Basagran® herbicide** as a tank mix partner at the rate of 6 to 16 ounces per acre to minimize crop response. Recommended nitrogen based fertilizers include liquid fertilizers (such as 28% N, 32% N or 10-34-0) at the rate of 2.5 gallons per 100 gallons of spray solution.

Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

For enhanced grass activity, add a crop oil concentrate at a rate of 1 gallon per 100 gallons per acre instead of a non-ionic surfactant. Always add **Basagran** at the rates indicated above when crop oil concentrate and/or a nitrogen based fertilizer are used in the spray mixture. **Basagran** applications at rates higher than 16 ounces per acre may reduce grass control.

**Raptor** may be applied a minimum of one hour before rainfall or overhead irrigation.

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**WEEDS CONTROLLED BY RAPTOR® HERBICIDE**

	Application Rate	
	RAPTOR at 3 oz./A	RAPTOR at 3 oz./A + Basagran at 6 - 16 oz./A
Maximum Weed Size (Inches)		
Mustard,		
Tumble	3	3
Wild	3	3
Black	3	3
Nightshade,		
Black	3	3
Eastern black	3	3
Hairy	3	3
Penycress, field	3	3
Pigweed,		
Redroot	3	3
Smooth	3	3
Spiny	3	3
Shepherdspurse	3	3

**ROTATIONAL CROP GUIDELINES**

See main **Raptor** label for rotational plant-back intervals following applications of **Raptor**.

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Supersedes NVA 2002-04-133-0039

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



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# Supplemental Labeling

EPA Reg. No. 241-379

## For Postemergence Use in Lima Beans (succulent) in Delaware, Illinois, Maryland, Minnesota, Virginia and Wisconsin Only

**OBSERVE ALL PRECAUTIONARY STATEMENTS AND SPRAYING INFORMATION IN THE RAPTOR® HERBICIDE LEAFLET LABEL BEFORE USING. REFER TO THE RAPTOR LEAFLET LABEL FOR FIRST AID AND WORKER PROTECTION STANDARD REQUIREMENTS.**

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of pesticide application.

When **Raptor** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded. **Raptor** cannot be mixed with any product containing a label prohibiting such mixtures. Do not use **Raptor** other than in accordance with the instructions set forth on this label. Keep containers closed to avoid spills and contamination.

**DO NOT** apply to lima beans that have been seriously injured from applications of soil-applied herbicides such as Dual® Magnum, Eptam®, or Cobra® herbicides.

THIS PRODUCT WHEN USED ON LIMA BEANS (SUCCULENT) MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE.

### GENERAL PRECAUTIONS

**DO NOT** make more than one application of **Raptor** per year.

If arid conditions occur during the year of application, rotational crop injury may occur.

Ensure spray drift to non-target species does not occur.

**DO NOT** apply **Raptor** in any manner not specifically described in this label.

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

When applied by either land or air, **Raptor** spray drift or other indirect contact may injure sensitive crops including non-imidazolinone tolerant wheat or canola, sugarbeets, and leafy vegetables.

Spray equipment used for **Raptor** application must be drained and thoroughly cleaned with water before being used to apply other products.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

NOV 19 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 241-379

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In the event of a crop loss due to weather, edible legumes, **CLEARFIELD\*** canola, **CLEARFIELD\*** corn, **CLEARFIELD\*** sunflowers, **CLEARFIELD\*** wheat, or soybeans can be replanted. Do not make an additional application of **Raptor® herbicide**.

## DISCLAIMER

BASF MAKES THIS PRODUCT AVAILABLE TO THE USER AND/OR GROWER SOLELY TO THE EXTENT THAT THE BENEFIT AND UTILITY, IN THE SOLE OPINION OF THE USER AND/OR GROWER, OUTWEIGH THE EXTENT OF POTENTIAL INJURY ASSOCIATED WITH THE USE OF THIS PRODUCT. THE DECISION TO USE OR NOT TO USE THIS HERBICIDE MUST BE MADE BY EACH INDIVIDUAL **RAPTOR** USER AND/OR GROWER ON THE BASIS OF POSSIBLE CROP INJURY FROM **RAPTOR**, THE SEVERITY OF WEED INFESTATION, THE COST OF ALTERNATIVE WEED CONTROLS, AND OTHER FACTORS. BASF INTENDS THAT BECAUSE OF THE RISK OF FAILURE TO PERFORM OR CROP DAMAGE THAT ALL SUCH USE IS AT THE USER'S AND/OR GROWER'S RISK. BASF DISCLAIMS ANY LIABILITY FOR CLAIMS, CAUSES OF ACTION, FINES, PENALTIES, DAMAGES, INCLUDING CONSEQUENTIAL INCIDENTS AND DAMAGES, LOSSES, LIABILITIES, JUDGEMENTS, AND EXPENSES ARISING OUT OF OR RELATING TO INJURY TO PERSONS, CROPS, OR PROPERTY RESULTING FROM THE USE OF **RAPTOR** ON LIMA BEANS (SUCCULENT) CONTRARY TO THE LABEL INSTRUCTIONS.

## GENERAL INFORMATION

Use **Raptor ONLY** if proper agronomic practices have been utilized, including good soil fertility, proper crop rotation, disease and insect management and tillage practices that eliminate compaction and hardpans.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following **Raptor** applications in lima beans. These effects can be more pronounced if crops are growing under stressful environmental or hot and humid conditions. These effects occur infrequently and are temporary. Normal growth and appearance should resume within days.

## APPLICATION INSTRUCTIONS

**Early Postemergence Applications:** Apply **Raptor** at the broadcast rate of 4 ounces per acre, tank mixed with **Basagran® herbicide** at 6 to 16 ounces per acre. When used in lima beans, **Raptor** must be applied with **Basagran** to minimize crop response. **Basagran** applications at rates higher than 16 ounces per acre may reduce grass control.

Application timing should be based on weed size and crop growth stage. Apply to crop and weeds that are actively growing. Apply **Raptor + Basagran** postemergence to lima beans in the first to second trifoliolate leaf stage and weeds that are less than 3 inches tall. Applications before the first trifoliolate leaf stage may result in increased crop response. **DO NOT** apply **Raptor + Basagran** to lima beans during flowering.

A non-ionic surfactant must be added to the spray solution. The non-ionic surfactant must contain at least 80% active ingredient and should be used at a rate of 1 quart per 100 gallons of spray solution.

**Raptor** tank mixes with any pesticide other than **Basagran** are not recommended. Certain insecticide and herbicide tank mixes with **Raptor** in lima beans have shown unacceptable crop response.

**Raptor** may be applied a minimum of one hour before rainfall or overhead irrigation.

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**BROADLEAF WEEDS CONTROLLED BY RAPTOR® HERBICIDE**

**Application Rate**

**RAPTOR at 4 oz./A +  
Basagran at 6 - 16 oz./A**

**Maximum Weed Size (Inches)**

Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Jimsonweed	3
Mustard,	
Tumble	3
Wild	3
Black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3

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**BROADLEAF WEEDS SUPPRESSED BY RAPTOR® HERBICIDE**

**Application Rate**

**RAPTOR at 4 oz./A +  
Basagran at 6 – 16 oz./A**

**Maximum Weed Size (inches)**

Buckwheat, wild	3
Chickweed, common	3
Cocklebur, common	3
Lambsquarters, common	3
Knotweed, prostrate	3
Kochia <sup>1</sup>	3
Lettuce, miners	3
Morningglory	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tail	3
Purslane, common	3
Rocket, London	3
Smartweed	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

<sup>1</sup>**Raptor** control non-ALS resistant kochia only.

9/6/11

**GRASS WEEDS CONTROLLED BY RAPTOR® HERBICIDE**

Application Rate	
RAPTOR at 4 oz./A + Basagran at 6 - 16 oz./A	
Maximum Weed Size (inches)	
Barnyardgrass	3
Blackgrass	3
Brome,	
Downy	3
Cheat	3
Japanese	3
Canarygrass, littleseed	3
Cereals, volunteer	
Barley	3
Oat	3
Wheat (non-CLEARFIELD*)	3
Darnel, Persian	3
Foxtail,	
Giant	3
Green	3
Yellow	3
Jointed goatgrass	3
Oats, wild	3
Ryegrass, Italian	3
Shattercane	3
Volunteer corn <sup>1</sup>	2-8

<sup>1</sup> Except imidazolinone tolerant corn

**GRASS WEEDS SUPPRESSED BY RAPTOR**

Application Rate	
RAPTOR at 4 oz./A + Basagran at 6 - 16 oz./A	
Maximum Weed Size (inches)	
Johnsongrass, rhizome	3
Crabgrass,	
Large	3
Smooth	3
Sedges	
Purple	3
Yellow	3
Quackgrass	3



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## ROTATIONAL CROP GUIDELINES

See main **Raptor® herbicide** label for rotational plant-back intervals following applications of **Raptor** herbicide.

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The Chemical Company

**Raptor**  
herbicide

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## Supplemental Labeling

FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF OREGON

EPA Reg. No. 241-379

### TANKMIX WITH BASAGRAN® HERBICIDE FOR WEED CONTROL IN CRIMSON AND RED CLOVER

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This supplemental labeling and the main **RAPTOR**® herbicide and BASAGRAN labels must be in the possession of the user at the time of pesticide application.

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.

Observe all cautions and limitations on this label and on the labels of products used in combination with **RAPTOR** herbicide. Do not use **RAPTOR** other than in accordance with the instructions set forth on this label. The use of **RAPTOR** not consistent with this label may result in injury to crops.

#### Uses With Other Products (Tank-mixes)

If this product is used in combination with any other product except as specifically recommended in writing by BASF Corporation, then BASF Corporation shall have no liability for any loss, damage or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by BASF Corporation, it is intended by BASF Corporation that the liability of BASF Corporation shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF Corporation product in such combinations used, and in any event shall be limited to return of the amount of the purchase price of the BASF Corporation product. Nothing in this disclaimer limits the Buyer's rights under applicable state tort law.

#### APPLICATION INSTRUCTIONS

##### APPLICATION TIMING:

Apply **RAPTOR** as an early postemergence treatment only in a tankmix as described below when the crimson and red clover has a minimum of 3 trifoliolate leaves and when the majority of the weeds are 1-3 inches tall.

##### USE RATE (5 OUNCES PER ACRE):

Apply **RAPTOR** postemergence only at a broadcast rate of 5 ounces per acre.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

**BASF**

Agricultural Products

NOV 19 2004

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

241-379

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**RAPTOR® herbicide**

**APPLICATIONS OF RAPTOR® HERBICIDE IN CLOVER REQUIRE THE ADDITION OF A SURFACTANT AND BASAGRAN® HERBICIDE.**

**I. ADJUVANTS:**

**Nonionic Surfactant:** use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 0.25% v/v (1 quart per 100 gallons of spray solution).

**II. BASAGRAN HERBICIDE:** (EPA Reg. No. 7969-45)

Add BASAGRAN at 6-16 fluid ounces per acre to minimize possible crop injury. BASAGRAN application at rates higher than 16 fluid ounces per acre may reduce grass control.

**RAPTOR** plus **BASAGRAN** tankmix should be applied a minimum of four hours before rainfall or overhead irrigation.

**MIXING SEQUENCE**

Use the following mixing sequence when adding **RAPTOR** and **BASAGRAN** to the spray tank. Thoroughly mix after adding each component:

- 1) Fill spray tank 1/2 to 3/4 full with clean water.
- 2) Add **RAPTOR** and thoroughly mix.
- 3) Add **BASAGRAN** and thoroughly mix.
- 4) Add surfactant to the spray tank.
- 5) While agitating, fill the remainder of the tank with water.

When **RAPTOR** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages should be exceeded. **RAPTOR** cannot be mixed with any product containing a label prohibiting such mixtures.

**SPRAYING INSTRUCTIONS**

DO NOT apply when wind velocity is greater than 10 mph for ground application, when temperature inversion conditions exist, or when spray may be carried to sensitive crops. Sensitive crops include but are not limited to leafy vegetables, canola, and sugar beet.

NOTE: Only one application of **RAPTOR** may be made during the growing season

Applicator must follow all state laws and label directions, restrictions, and precautions.

**GROUND APPLICATION:**

Uniformly apply with properly calibrated ground equipment in 20 or more gallons of water per acre. A spray pressure of 40 psi is recommended.

Adjust the boom height to ensure proper coverage of weed foliage (according to the manufacturer's recommendation). Use only flat-fan nozzle tips.

Avoid overlaps when spraying.

100/1111



RAPTOR® herbicide

**WEEDS CONTROLLED**

RAPTOR will control or suppress the weeds listed below when applied postemergence to 1 to 3 inch weeds (unless otherwise indicated) at the recommended rates listed below.

**BROADLEAF WEEDS CONTROLLED BY RAPTOR**

**RAPTOR at 5 fluid oz./A with a surfactant and  
BASAGRAN**

	<b>Maximum Weed Size (inches)</b>
Bedstraw	3
Beet, wild	3
Buttercup	3
Chickweed, common	3
Cocklebur, Common	3
Flixweed	3
Jimsonweed	3
Mustard,	
tumble	3
wild	3
black	3
Nightshade,	
Black	3
Eastern black	3
Hairy	3
Pennycress, field	3
Pigweed,	
Redroot	3
Smooth	3
Spiny	3
Puncturevine	3
Radish, wild	3
Shepherdspurse	3
Tansymustard, green	3
Velvetleaf	3

10/1/11



RAPTOR® herbicide

**BROADLEAF WEEDS SUPPRESSED BY RAPTOR**

<b>RAPTOR at 5 fluid oz./A with a surfactant and BASAGRAN</b>	
<b>Maximum Weed Size (inches)</b>	
Buckwheat, wild	3
Chickweed, common	3
Knotweed, prostrate	3
Kochia*	3
Lambsquarters, common	3
Lettuce, miners	3
Morningglory	
Entireleaf	3
Ivyleaf	3
Smallflower	3
Tall	3
Purslane, common	3
Rocket, London	3
Rocket, yellow	3
Smartweed	
Ladysthumb	3
Pennsylvania	3
Spurge, prostrate	3

\*RAPTOR controls non-ALS resistant kochia only.

**GRASS SUPPRESSION**

RAPTOR at 5 ounces per acre tankmixed with BASAGRAN at 32 ounces per acre will provide suppression of many annual grass weed species.

**ROTATIONAL CROP RESTRICTIONS**

Follow rotational crop restrictions on RAPTOR and BASAGRAN labels. Use the most restrictive label.

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**RAPTOR® herbicide**

### **RESTRICTIONS AND PRECAUTIONS**

When using **RAPTOR** plus **BASAGRAN** tankmix, always follow the most restrictive label.

**DO NOT** make more than one **RAPTOR** application per growing season.

If arid conditions occur during the year of application rotational crop injury may occur.

Do not apply to clover 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 apply to weeds under stress, such as lack of moisture, previous herbicide injury, mechanical injury or cold temperatures, as unsatisfactory control could result.

Do not apply more than a total of 4 pints of **BASAGRAN** per acre, per calendar year or 2.0 pounds of bentazon active ingredient (a.i.) from all sources per acre, per calendar year.

Do not graze livestock or harvest forage or hay for livestock feed for at least 36 days after treatment.

Ensure spray drift to non-target species does not occur.

Do not apply this tank mixture in any manner not specifically described in this label.

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

**RAPTOR** spray drift or other indirect contact may injure sensitive crops, including non-imidazolinone tolerant wheat or canola, sugarbeets, and leafy vegetables.

Spray equipment used for application must be drained and thoroughly cleaned with water before being used to apply other products.

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**RAPTOR® herbicide**

**DISCLAIMER**

THIS PRODUCT WHEN USED ON CRIMSON CLOVER MAY LEAD TO CROP INJURY, LOSS, OR DAMAGE. BASF CORPORATION RECOMMENDS THAT THE USER AND/OR GROWER TEST THIS PRODUCT IN ORDER TO DETERMINE ITS SUITABILITY FOR SUCH INTENDED USE. BASF MAKES THIS PRODUCT AVAILABLE TO THE USER AND/OR GROWER SOLELY TO THE EXTENT THAT THE BENEFIT AND UTILITY, IN THE SOLE OPINION OF THE USER AND/OR GROWER, OUTWEIGH THE EXTENT OF POTENTIAL INJURY ASSOCIATED WITH THE USE OF THIS PRODUCT. THE DECISION TO USE OR NOT TO USE THIS HERBICIDE MUST BE MADE BY EACH INDIVIDUAL **RAPTOR** USER AND/OR GROWER ON THE BASIS OF POSSIBLE CROP INJURY FROM **RAPTOR**, THE SEVERITY OF WEED INFESTATION, THE COST OF ALTERNATIVE WEED CONTROLS, AND OTHER FACTORS. BASF INTENDS THAT BECAUSE OF THE RISK OF FAILURE TO PERFORM OR CROP DAMAGE THAT ALL SUCH USE IS AT THE USER'S AND/OR GROWER'S RISK.

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**RAPTOR® herbicide**

**BASF**

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**Agricultural Products**

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The Chemical Company



**BEYOND**

HERBICIDE | CLEARFIELD® PRODUCTION SYSTEM

105/111

**Supplemental  
Labeling**

EPA Registration No. 241-379

**FOR USE ON CLEARFIELD® SPRING WHEAT**

**Apply Only on CLEARFIELD® Wheat Varieties**

**OBSERVE ALL PRECAUTIONARY STATEMENTS AND SPRAYING INFORMATION IN THE BEYOND™ HERBICIDE LEAFLET LABEL BEFORE USING. REFER TO THE BEYOND LEAFLET LABEL FOR FIRST AID AND WORKER PROTECTION STANDARD REQUIREMENTS.**

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of pesticide application.

**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.

**GENERAL PRECAUTIONS**

Ensure spray drift to non-target species does not occur.

**DO NOT** apply **Beyond** in any manner not specifically described in this label.

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

When applied by either ground or air, **Beyond** spray drift or other indirect contact may injure sensitive crops, including non-imidazolinone tolerant wheat, sunflower or canola, sugarbeets, and leafy vegetables.

Spray equipment used for **Beyond** application must be drained and thoroughly cleaned with water before being used to apply other products.

Observe all cautions and limitations on this label and on the labels of products used in combination with **Beyond** herbicide. **DO NOT** use **Beyond** other than in accordance with the instructions set forth on this label. Keep containers closed to avoid spills and contamination.

**ACCEPTED  
with COMMENTS  
in EPA Letter Dated**

NOV 19 2004

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

241-379

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**DISCLAIMER**

The label instructions for the use of this product reflect the opinion of experts based on research and field use. 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, herbicide resistant weed populations, or the use of, or application of the product contrary to label instructions, all of which are beyond the control of BASF Corporation. All such risks shall be assumed by the user.

BASF shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

BASF warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above. **BASF DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF BEYOND™ HERBICIDE.** In no case shall BASF or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

**USES WITH OTHER PRODUCTS (TANK-MIXES)**

If this product is used in combination with any other product except as specifically recommended in writing by BASF, then BASF shall have no liability for any loss, damage or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by BASF, the liability of BASF shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF product in such combination use, and in any event shall be limited to return of the amount of the purchase price of the BASF product.

**MIXING INSTRUCTIONS**

POSTEMERGENCE APPLICATIONS OF **BEYOND** REQUIRE THE ADDITION OF AN ADJUVANT AND A NITROGEN FERTILIZER SOLUTION.

**I. SURFACTANTS:**

Use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 1 quart per 100 gallons of spray solution (0.25% vol/vol.).

**AND**

**II. NITROGEN FERTILIZER:**

Recommended nitrogen based fertilizers include liquid fertilizers (such as liquid ammonium sulfate, 28% N, 32% N, or 10-34-0) at the rate of 1.5 - 2.5 gallons per 100 gallons of spray solution (1.5 - 2.5% vol/vol.). Instead of liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 12-15 pounds per 100 gallons of spray solution.

**DO NOT USE CROP OIL CONCENTRATE OR METHYLATED SEED OIL WITH BEYOND IN CLEARFIELD\* SPRING WHEAT.**

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## TANK MIX COMBINATIONS WITH OTHER HERBICIDES

If other herbicides or other spray tank components are tank-mixed with **Beyond™** herbicide, while agitating, add components in the following order and thoroughly mix after adding each component:

- 1) Fill spray tank 1/2 to 3/4 full with clean water.
- 2) Add soluble packet products and thoroughly mix.
- 3) Add WP (wetttable powder), DG (dispersible granule), DF (dry flowable) or liquid flowable formulations not in soluble packets.
- 4) Add **Beyond** and thoroughly mix.
- 5) Add other aqueous solution products.
- 6) Add EC (emulsifiable concentrate) products.
- 7) Add surfactant to the spray tank.
- 8) Add nitrogen fertilizer solution.
- 9) While agitating, fill the remainder of the tank with water.

To avoid injury to sensitive crops, spray equipment used for **Beyond** applications must be drained and thoroughly cleaned with water before being used to apply other products.

When **Beyond** is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded. **Beyond** cannot be mixed with any product containing a label prohibiting such mixtures.

## APPLICATION INFORMATION

**Apply Beyond as a postemergence treatment when weeds are actively growing and before they exceed the maximum recommended size (see weed control tables following each crop).** Delay application until the majority of the weeds are at the recommended growth stage. In general, **Beyond** should be applied when weeds are small and actively growing.

A surfactant and a nitrogen fertilizer must be added to the spray solution for optimum weed control activity. See the **ADJUVANT** section under **MIXING INSTRUCTIONS** for specific instructions.

When **Beyond** is applied postemergence, absorption will occur through both the roots and foliage. Susceptible weeds stop growing and either die or are not competitive with the crop. **Beyond** not only controls many existing broadleaf and grass weeds when applied postemergence, it also provides activity on susceptible weeds that may emerge shortly after application.

Weeds are most easily controlled when actively growing. Under conditions of cold temperatures (less than 40° F, maximum daytime temperatures), weed control may be less than optimal.

## CLEARFIELD\* SPRING WHEAT - DIRECTIONS FOR USE

**Beyond** can be applied postemergence on **CLEARFIELD\* WHEAT** (imidazolinone tolerant wheat) varieties. Apply only on selected spring wheat varieties labeled as "**CLEARFIELD\***" and warranted by the seed supplier to possess tolerance to direct application of certain imidazolinone herbicides. **DO NOT** apply **Beyond** to wheat varieties which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or BASF to obtain information regarding **CLEARFIELD\*** wheat varieties.

**Apply Beyond as an early postemergence treatment when weeds are actively growing and before broadleaf weeds exceed a height of 3 inches and grasses exceed 4-5 leaves** (unless otherwise indicated). Under conditions of cold temperatures (less than 40° F, maximum daytime temperatures), weed control may be less than optimal. A thin stand of

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wheat may result in unacceptable weed control. **Beyond™ herbicide** is effective in controlling weeds in conservation tillage and conventional tillage wheat production systems. Delay application until the majority of the weeds are at the recommended growth stage. When a mixture of grasses and broadleaf weeds are present, time the application to the grass weeds for optimum control.

When adequate soil moisture is present, **Beyond** will provide residual activity of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Occasionally, reduction in plant height or temporary yellowing of crop plants may occur following **Beyond** applications. These effects can be more pronounced in spray overlap areas and/or if crops are growing under stressful environmental conditions (such as, but not limited to, drought, excessive moisture, improper fertility, improper varietal adaptation, poor planting conditions, etc.). To avoid possible crop injury, **DO NOT** apply **Beyond** herbicide to **CLEARFIELD\*** wheat when extreme cold temperatures (less than 40° F, maximum daytime temperatures) are expected within one week of application. Crop response associated with stress conditions and overlaps shall be the responsibility of the user.

Weed control is optimized when **Beyond** is applied to actively growing wheat. Plant a locally adapted **CLEARFIELD\*** variety at the normal seeding rate for your geography. Apply to wheat after tiller initiation has begun and prior to the jointing stage of growth (and when the weeds are at the appropriate size – see **WEEDS CONTROLLED** tables).

**BEYOND APPLICATION TIMING**

Apply **Beyond** at the following crop and weed stages of growth:

<b>CLEARFIELD*</b> Wheat	4 leaf to prior to joint
Broadleaf weeds	Refer to weed control tables for specific weed sizes.
Grass weeds	

**WEEDS CONTROLLED – SPRING WHEAT**

**Beyond** will control or suppress the weeds listed below when applied postemergence at the recommended rates listed below.

**BROADLEAF WEEDS CONTROLLED BY BEYOND  
(4 Ounces per Acre)**

	<b>Weed Size</b>
	<b>Maximum size (Inches)</b>
Canola, volunteer	5
Chickweed, common	3
Cocklebur, common	3
Flixweed	3
Henbit	3
Knotweed, prostrate	3
Lambsquarters, common <sup>1</sup>	1
Mallow,	
Common	3
Venice	1
Mustard,	
tumble	3
wild	4

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black	4
blue	4
Nightshade,	
Black	5
Eastern black	5
Hairy	5
Pennycress, field	3
Pigweed,	
Redroot	5
Smooth	4
Spiny	3
Purslane, common	3
Radish, wild	3
Rocket, London	5
Rocket, yellow	5
Shepherdspurse	5
Smartweed,	
Ladysthumb	3
Pennsylvania	3
Spurge, prostate	3
Tansymustard, green	4
Thistle, Russian (non-ALS resistant)	3
Velvetleaf	3

<sup>1</sup> **Beyond** provides suppression of common lambsquarters east of the Rocky Mountains.

**BROADLEAF WEEDS SUPPRESSED BY BEYOND APPLICATIONS  
(4 Ounces per Acre)**

		<b>Weed Size</b>
		<b>Maximum size (Inches)</b>
Bedstraw		3
Buckwheat, wild <sup>1</sup>		3
Dandelion		3
Ragweed,		
Common		3
Giant		3
Thistle, Canada		3

<sup>1</sup>See **SPECIFIC WEED PROBLEMS** section for more information.

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### GRASS WEEDS CONTROLLED BY BEYOND – SPRING WHEAT (4 Ounces per Acre)

	Weed Size
	Number of Leaves (Maximum Tillers)
Barnyardgrass	1-5 (1)
Brome,	
California	1-5 (2)
downy	1-5 (2)
cheat	1-5 (2)
Japanese	1-5 (2)
Canarygrass, littleseed	1-5 (2)
Cereals, volunteer	
Barley	1-6 (1)
Oat	1-6 (1)
Wheat (non-CLEARFIELD*)	1-4 (1)
Corn, volunteer (non-CLEARFIELD*)	1-4
Crabgrass, large	1-4 (1)
Darnel, Persian	1-5 (2)
Foxtail,	
Giant	1-6 (2)
Green	1-4 (1)
Yellow	1-4 (1)
Jointed goatgrass	1-5 (2)
Oats, wild <sup>1</sup>	1-5 (2)
Rescuegrass	1-4 (1)
Ryegrass, Italian <sup>1</sup>	1-4 (1)
Rye, feral or cereal <sup>1</sup>	1-4 (1)

<sup>1</sup>See **SPECIFIC WEED PROBLEMS** section.

#### **SPECIFIC WEED PROBLEMS**

**Feral Rye (cereal, volunteer rye):** **Beyond** controls emerged feral rye only. Apply to feral rye before the first tiller forms. Once feral rye develops tillers, control is significantly reduced.

**Italian Ryegrass:** **Beyond** controls emerged Italian Ryegrass only. Under favorable growing conditions, ryegrass may germinate over several weeks

**Kochia:** Naturally occurring ALS/AHAS resistant biotypes of kochia are common in wheat fields. In many cases, a tank mixture with **Beyond** will be required for acceptable control. Apply **Beyond** in a tank mixture with a herbicide(s) recommended to control on kochia (e.g. **Clarity**<sup>®</sup> herbicide + 2,4-D). Apply to kochia 2 inches in size or less.

**Wild Buckwheat:** For enhanced control of wild buckwheat, add Starane<sup>®</sup> herbicide or **Clarity** to the tank mixture. Apply to wild buckwheat with no more than 2 true leaves.

**Wild Oats:** **Beyond** controls emerged wild oats only. Under favorable growing conditions, wild oats may germinate over several weeks. **Beyond** does not provide residual control of wild oats.

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## TANK MIX HERBICIDE COMBINATIONS WITH BEYOND™ HERBICIDE

Recommended Tank Mixes For Postemergence Applications of **Beyond** on **CLEARFIELD\*** Wheat Varieties are:

Barvel®	Clarity®	MCPA
Bronate® (bromoxynil + MCPA)	Curtail M® 2,4-D Ester	Starane™
Buctril®		

Limit bromoxynil applications (Bronate or Buctril) to 0.5 lb/acre of active ingredient when tankmixed with **Beyond**.

When broadleaf herbicides are tankmixed with **Beyond**, there may be some reduction in weed control, particularly grass weeds.

**ALS inhibiting herbicides such as Ally®, Amber®, Everest™, Finesse®, Express®, Harmony® Extra, Maverick™ and Silverado™ should not be tankmixed with Beyond. Beyond tankmixes with ALS inhibiting herbicides may result in unacceptable crop response.**

When **Beyond** is used in combination with another herbicide, refer to the respective label for rates, methods and proper timing of application, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label use directions and precautions.

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Curtail M and Starane are trademarks of Dow Agrosience.

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