

7969-194

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

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Craig D. Kleppe, Ph.D.
Product Registration Manager
BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709-3528

JAN 11 2011

Subject: Label Amendment: clarify use rate of bentazon
per request of the Pesticide Re-evaluation Division
Product Name: Rezult Herbicide
EPA Reg. No. 7969-194
Application dated September 23, 2010
Decision No. 440500

Dear Dr. Kleppe:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

Submit one (1) copy of final printed labeling before you release the product for shipment.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathryn V. Montague".

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)

enclosure

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor for treatment advice. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give any liquid to the person. • DO NOT give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).</p>	
<p>Note to physician: May pose an aspiration pneumonia hazard. Contains petroleum distillate.</p>	

Precautionary Statements

Hazards to Humans and Domestic Animals

Caution. Causes moderate eye injury. Harmful if swallowed or absorbed through skin. 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 E** on an EPA chemical resistance category selection chart.

- Applicators and other handlers must wear:**
- Long-sleeved shirt and long pants.
 - Chemical-resistant gloves such as, or made of, any water-proof material.
 - Shoes plus socks.

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

Engineering Controls Statement
When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

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

Environmental Hazards
DO NOT apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment wash waters.

Endangered Species Concerns
Notice: The use of any pesticide in a manner that may kill or otherwise harm an endangered or threatened species or adversely modify their habitat is a violation of Federal law.

In Case of Spill
In case of large-scale spillage regarding this product, avoid contact, isolate area, and keep out animals and unprotected persons. Confine spill and call:

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

Directions For Use

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

Read the **Precautionary Statements, Environmental Hazards, Storage and Disposal, and Conditions of Sale and Warranty** sections appearing in this booklet.

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 **48 hours**.

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

- Coveralls.
- Chemical-resistant gloves such as barrier laminate, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, or viton \geq 14 mils.
- Shoes plus socks.
- Protective eyewear.

Product Information

Apply **Rezult[®] herbicide** for postemergence control of a wide spectrum of broadleaf and grass weeds in dry beans, dry peas, peppermint, soybeans, spearmint,

Poast Protected[®] field corn, **Poast Protected** sweet corn and field corn or sweet corn grown for **Poast Protected** seed.

Duplex[®] II System

Rezult is provided in a molded jug pack that contains enough sodium salt of bentazon and sethoxydim to treat 5 acres.

Duplex[®] Single-Pour System

Rezult is provided in a molded single-pour jug that contains enough sodium salt of bentazon and sethoxydim to treat 5 acres.

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.

Storage and Disposal

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

Pesticide Storage

DO NOT allow this product to freeze.

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Nonrefillable Container. **DO NOT** reuse or refill this

container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake

(capacity \leq 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Mode of Action

Rezult® herbicide is effective through postemergence contact and systemic activity. Weeds must be thoroughly covered with spray. Large crop-and-weed-leaf canopies shelter smaller weeds and prevent adequate spray coverage.

Crop Tolerance

All soybean varieties are tolerant to **Rezult** at all stages of growth. Leaf speckling may occur, but plants generally outgrow this condition within 10 days.

Only Poast Protected® field corn and Poast Protected sweet corn hybrids are tolerant to Rezult applications. Severe crop injury will occur to corn hybrids not labeled as either Poast Protected field corn or Poast Protected sweet corn.

Apply to dry beans after the first trifoliolate leaf has fully expanded and apply after dry peas have at least three (3) pairs of leaves or four (4) nodes. Applications prior to these stages may result in severe crop injury. Dry bean and dry pea injury can be very pronounced. Even at the tolerant stages, yellowing, bronzing, speckling or burning of leaves may occur under certain conditions (see **Restrictions and Limitations**). This temporary injury is generally outgrown without delaying podset or maturity or reducing yield. Using oil with **Rezult** may increase injury and may reduce yields. Tolerant bean and pea types are adzuki bean, navy bean, pinto bean, pink bean, great northern bean, kidney bean, red bean, white bean, cranberry bean, black turtle soup bean, dry lima bean, dry snap bean, and dry edible peas (field peas).

In western irrigated dry bean areas, it may be necessary to irrigate prior to application of **Rezult** to ensure that weeds are actively growing. Weeds that are growing under moisture stress are not actively growing and will not be satisfactorily controlled. In this irrigated area, avoid applying **Rezult** during prolonged periods of cold weather (day temperature below 75° F and night temperature below 55° F for 2 to 5 days) because weed control may be reduced.

Peppermint and spearmint are tolerant to **Rezult**, however, some leaf burning may occur under certain conditions, such as when plants are growing very actively and have extensive new, succulent tissue. Peppermint and Spearmint plants generally outgrow this condition within 10 days.

Essentially, all grass crops such as sorghum, non-**Poast Protected** corn and small grain, as well as ornamental grasses such as turf, are susceptible to **Rezult**; therefore, avoid all direct or indirect contact with any grass crop.

Rotational Crops

Plantback/Rotation Restriction: If replanting or crop rotation is necessary in treated fields, **DO NOT** plant any crop for 30 days following the last application of **Rezult** unless **Rezult**, **Poast**® herbicide or **Poast Plus**® herbicide is registered for use on the crop. If tank mixing with **Ultra Blazer**®, **Classic**®, **Concert**®, or **Reflex**® herbicides in soybeans, refer to respective label for crop rotation restrictions. If tank mixing with atrazine, **Banvel**®, **Clarity**®,

or 2,4-D LVE herbicides for use in **Poast Protected** field corn, or **Poast Protected** sweet corn, refer to respective label for crop rotation restrictions.

Cultivation

DO NOT cultivate within 5 days before applying **Rezult** or within 7 days after application. Cultivation may put weeds under stress and reduce control.

A timely cultivation 7 days after applying **Rezult** may provide season-long weed control.

Application Instructions

Application Timing and Rate

Apply **Rezult** early postemergence to actively growing weeds before they reach the sizes listed in **Table 1**.

Apply **Rezult** at a maximum total rate of 3.2 pints per acre. This rate delivers 1.6 pints per acre of the bentazon component (equivalent to 1.0 lb ai/A) and 1.6 pints of the sethoxydim component (equivalent to 0.2 lb ai/A).

Use the entire contents (2 gallons) of this container to treat 5 acres, which is equivalent to 3.2 pints of **Rezult** per acre. **DO NOT apply the contents in the individual compartments of the Rezult container in any combination other than a 1:1 ratio.**

An additional 2 pints of **Basagran**® herbicide per acre per season may be applied after a single application of **Rezult**.

In dry beans and dry peas, an additional 2.9 pints of **Poast** per acre per season may be applied after a single application of **Rezult**.

In soybeans, an additional 5.9 pints of **Poast Plus** per acre per season may be applied after a single application of **Rezult**.

In peppermint and spearmint, an additional 3.9 pints of **Poast** per acre maybe applied after a single application of **Rezult**.

In **Poast Protected** field corn, an additional 2.9 pints of **Poast Plus** per acre per season may be applied after a single application of **Rezult**.

In **Poast Protected** sweet corn, an additional 1.9 pints of **Poast** per acre per season may be applied after a single application of **Rezult**. The additional application of **Poast** should be made 10 days or later following the application of **Rezult**.

Ground Application. Use a minimum of 10 gallons of water per broadcast acre at 60 psi (measured at the boom, not at the pump or in the line) to ensure adequate spray coverage. When crop and weed foliage is dense, use up to 20 gallons of water at 40 to 60 psi. Use standard high-pressure hollow cone or flat fan nozzles spaced 20 inches apart. **DO NOT** use flood or whirl chamber nozzles. Brass nozzles are not recommended because of the corrosive effects of nitrogen additives.

At lower volumes (e.g., 10 gallons of spray volume per acre) use a minimum nozzle size of 8002 or equivalent to minimize spray drift.

Air Application. Use a minimum of 5 gallons of water per acre and a maximum of 40 psi pressure. To obtain uniform coverage and to avoid drift hazards, the following application equipment and practices should be used:

Nozzle type. Use only diaphragm-type nozzles producing cone or fan spray patterns.

Nozzle height. Maximum of 10 feet above the crop.

Nozzle orientation. Nozzles must be oriented to discharge straight back with the air stream (opposite the direction of travel of the aircraft) or at some angle between straight back and straight down.

Nozzles must be located no farther than 3/4 the distance from the center of the aircraft to the end of the wing or rotor.

DO NOT apply **Rezult® herbicide** by aircraft within 200 feet upwind of ornamental or sensitive nontarget crops such as non-**Poast Protected®** corn, cotton, small grains, sugar beets, or sunflowers.

Applicator must follow the most restrictive use cautions to avoid drift hazard and must follow labeling as well as applicable state and local regulations and ordinances.

Additives

Always use 1 to 2 quarts of UAN solution or 1 to 2 pounds of AMS when applying **Rezult** in addition to 1 pint of spray additive or crop oil concentrate per acre except where noted (see **Tank Mix section**).

Nitrogen Solution

UAN solution is commonly referred to as 28%, 30%, or 32% nitrogen, and is a water solution of urea and ammonium nitrate. Because most nitrogen solutions are corrosive to galvanized steel and brass spray equipment, rinse the entire spray system with water after use.

Note about Ammonium Sulfate: Use high-quality ammonium sulfate (AMS) to avoid plugging of spray nozzles. The AMS must be readily soluble in water and contain no insoluble materials. Local sources of high-quality, spray-grade AMS are recommended. Low-quality AMS may contain material that will not readily dissolve which could result in nozzle tip plugging. To determine quality, perform a jar test adding 1/3 cup of AMS to 1 gallon of water and agitate for 1 minute. If any undissolved sediment is observed, predissolve the AMS in water and filter it before adding the AMS to the spray tank. If AMS can be added directly to the spray tank, add it slowly with agitation. Adding AMS too quickly may clog outlet lines. Ensure that the AMS is completely dissolved in the spray tank before adding other products. AMS is not recommended for aerial applications because of potential precipitation problems.

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Table 1. Maximum Weed Heights Controlled by Result® herbicide at the labeled rate* in Dry Beans, Dry Peas, Peppermint, Soybeans, Spearmint, Poast Protected® Field Corn and Poast Protected Sweet Corn

Broadleaves	Maximum Weed Height	Grasses	Maximum Weed Height	Perennials (top growth suppression)	Maximum Weed Height
Maximum Adjuvant rate (per acre)	1 pint of crop oil concentrate or spray additive + 1 to 2 quarts of UAN solution^a				
Balloonvine	3"	Barnyardgrass	4"	Canada Thistle ^b	bud stage
Beggarticks	8"	Broadleaf Signalgrass	4"	Johnsongrass ^c (Rhizome)	12"
Bristly Starbur	3"	Crabgrass, Large	4"	Quackgrass ^c	4"
Cocklebur	10"	, Smooth	4"	Wirestem Muhly ^c	4"
Dayflower	8"	Foxtail, Giant	4"	Yellow Nutsedge ^b	8"
Groundsel, Common	3"	, Green	4"		
Jimsonweed	10"	, Yellow	4"		
Ladysthumb	10"	Goosegrass	4"		
Lambsquarters, Common	2"	Johnsongrass (seedling)	4"		
Marshelder	4"	Junglerice	4"		
Mayweed/Dogfennel	3"	Panicum, Browntop	4"		
Purslane, Common	2"	, Fall	4"		
Prickly Sida/Teaweed	4"	, Texas	4"		
Radish, Volunteer	10"	Red Sprangletop	4"		
Ragweed, Common	3"	Ryegrass, Annual	4"		
, Giant	6"	Shattercane ^c	8"		
Redweed	8"	Volunteer Corn ^d	10"		
Shepherdspurse	8"	Wild Oats	3"		
Smartweed, Pennsylvania	10"	Wild Proso Millet	8"		
Spurred Anoda	4"	Witchgrass	4"		
Tropic Croton	4"	Woolly Cupgrass	4"		
Velvetleaf	6"				
Venice Mallow	4"				
Wild Buckwheat	5"				
Wild Mustard	8"				
Wild Sunflower ^b	8"				
Wild Poinsettia	6"				

*Result can be applied at a maximum rate of 3.2 pints per acre.

^a AMS can be substituted at 1-2 pounds per acre.

^b For regrowth or new germination, follow up 7-10 days later with **Basagran® herbicide**. Refer to **Basagran** label.

^c For regrowth or new germination, a follow-up application of **Poast Plus® or Poast® herbicide** may be necessary. Refer to **Poast Plus** and **Poast** labels.

^d Volunteer field and sweet corn must be non-**Poast Protected**. **Result, Poast** and **Poast Plus** will not control volunteer **Poast Protected** field corn or volunteer **Poast Protected** sweet corn.

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Mixing Order

Duplex® II Mixing

- 1) Fill tank of a thoroughly clean sprayer 1/2 to 2/3 full with clean water. Start agitation.
- 2) Add nitrogen fertilizer.
- 3) Add tank mix partner if applicable. Allow to mix thoroughly.
- 4) Add the entire contents in the compartment containing the sodium salt of bentazon to the spray tank. Allow to mix thoroughly.
- 5) Add entire contents in the compartment containing sethoxydim to the spray tank. Allow to mix thoroughly.
- 6) Add crop oil concentrate or spray additive (if applicable)* and the remaining volume of water. Allow to mix thoroughly.
- 7) Maintain constant agitation during application.
- 8) After dispensing the entire contents of the Duplex II container into the spray tank, spray within 48 hours.

*not required with all tank mixes (see Table 2)

Duplex® Single-Pour Mixing

The following steps apply when using the Duplex Single-Pour container system.

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

Maintain constant agitation during application.

*not required with all tank mixes (see Table 2)

Tank Mixing Applications

The products listed in Table 2 can be tank mixed with **Rezult**. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** in this label and the respective labels for products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Additives

Adjuvants are needed with these tank mixes to achieve consistent postemergence weed control. The standard label recommendation is 0.5 to 1 pint (maximum) of oil concentrate per acre plus 1 to 2 quarts (maximum) of UAN per acre.

AMS can be substituted for UAN (1 pound of AMS equals 1 quart of UAN).

Note: DO NOT add crop oil concentrate as an additive when tank mixing **Banvel® herbicide**, **Clarity® herbicide** or 2,4-D (LVE) with **Rezult**.

Table 2. Rezult Tank Mix Partners

Crop	Tank Mix Partners	
	Product	Rate of Application (per acre)
Dry Beans	Raptor®	--- ¹
	Pursuit®	--- ¹
Dry Peas	MCPA	--- ¹
	Thistrol®	--- ¹
Soybeans	Ultra Blazer®	Up to 10 ozs
	Raptor®	--- ¹
	Pursuit®	--- ¹
	Classic® Firstrate®	Up to 0.5 oz --- ¹
Peppermint and Spearmint	Buctril®	--- ¹
	Sinbar®	--- ¹
	Stinger®	--- ¹
Poast Protected® Sweet Corn	Atrazine	--- ¹
	Basagran®	--- ¹
	Outlook®	--- ¹
	Guardsman® Max Laddok® S-12	--- ¹ --- ¹
Poast Protected Field Corn	Atrazine	--- ¹
	Banvel®	Up to 8 ozs
	Clarity® 2,4-D (LVE)	Up to 8 ozs Up to 8 ozs

¹ See Product Label

Restrictions and Limitations

DO NOT apply **Result® herbicide** to labeled crops under stress due to lack of moisture, previous herbicide injury, mechanical injury, or cold temperatures, as crop injury may result.

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

DO NOT apply if rainfall or irrigation is expected within one hour following application.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Result** with other pesticides (fungicides, herbicides, insecticides or miticides), additives or fertilizers not recommended on the label.

BASF does not recommend the use of **Result** in tank mixes other than those listed on BASF labels, supplemental labels, or technical bulletins. Local agricultural authorities may be a source of information when using other than BASF recommended combinations.

DO NOT apply **Result** as a preplant or preemergent treatment prior to corn, millet, sorghum, or small grain crops.

DO NOT apply **Result** through any type of irrigation system.

DO NOT apply **Result** to dry beans or dry peas within 30 days of harvest.

In dry beans and dry peas, in one season, **DO NOT** apply more than a total of 2 pints per acre of **Basagran® herbicide** or more than a total of 2.9 pints per acre of **Poast® herbicide** after an application of 3.2 pints per acre of **Result**.

DO NOT apply **Result** to dry bean fields until beans have at least the first trifoliate leaf fully expanded or before dry peas have at least 3 pairs of leaves (4 nodes) because severe crop damage may occur.

DO NOT apply **Result** to dry peas under stress from root rot.

DO NOT apply **Result** to garbanzo beans or lupines at any stage of growth, as severe crop damage may occur.

Not recommended for use on adzuki beans in California.

DO NOT apply **Result** to peppermint or spearmint within 20 days of harvest.

DO NOT apply **Result** to soybeans within 75 days of harvest.

DO NOT graze treated soybean fields and **DO NOT** feed treated soybean forage (green succulent) or ensilage to livestock.

DO NOT cut treated soybean fields for hay for at least 30 days after the last treatment of **Result**. Only processed meal from seed or hay may be fed to animals.

In soybeans, in one season, **DO NOT** apply more than a total of 2 pints per acre of **Basagran** or more than a total of 5.9 pints per acre of **Poast Plus® herbicide** after an application of 3.2 pints per acre of **Result**.

DO NOT apply, in one season, more than a total of 3.2 pints per acre of **Result**.

DO NOT apply more than a total of 2 pounds of bentazon active ingredient (a.i.) from all sources per acre per calendar year.

DO NOT apply **Result** to corn hybrids which are not specifically labeled as **Poast Protected®** field corn because severe crop injury will occur.

Over-the-top applications of **Result** in **Poast Protected** field corn may be made until the onset of pollen shed.

DO NOT apply **Result** after pollination occurs.

DO NOT apply **Result** to **Poast Protected** field corn within 60 days of harvest of corn grain or fodder.

DO NOT apply **Result** to **Poast Protected** field corn within 45 days of harvest of corn forage/silage.

In **Poast Protected** field corn, in one season, **DO NOT** apply more than a total of 2 pints per acre of **Basagran** or more than a total of 2.9 pints per acre of **Poast Plus** after an application of 3.2 pints per acre of **Result**.

DO NOT graze treated **Poast Protected** field corn fields for at least 12 days after the last treatment of **Result**.

DO NOT apply **Result** to corn hybrids which are not specifically labeled as **Poast Protected** sweet corn because severe crop injury will occur.

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Restrictions and Limitations *(continued)*

Over-the-top applications of **Result**® herbicide in **Poast Protected**® sweet corn may be made until the onset of pollen shed.

DO NOT apply **Result** after pollination occurs.

DO NOT apply **Result** to **Poast Protected** sweet corn within 45 days of harvest of sweet corn grain and fodder.

DO NOT apply **Result** to **Poast Protected** sweet corn within 30 days of harvest of sweet corn forage/silage.

DO NOT apply **Result** to **Poast Protected** sweet corn within 30 days of harvesting fresh sweet corn.

In **Poast Protected** sweet corn, in one season, **DO NOT** apply more than a total of 2 pints per acre of **Basagran**® herbicide or more than a total of 1.9 pints per acre of **Poast**® herbicide after an application of 3.2 pints per acre of **Result**® herbicide. The additional application of **Poast** should be made 10 days or later following the application of **Result**.

DO NOT graze treated **Poast Protected** sweet corn fields for at least 12 days after the last treatment of **Result**.

In peppermint and spearmint, in one season, **DO NOT** apply more than a total of 2 pints per acre of **Basagran** or more than a total of 3.9 pints per acre of **Poast** after an application of 3.2 pints per acre of **Result**.

Plantback/Rotation Restriction: If replanting or crop rotation is necessary in treated fields, **DO NOT** plant any crop for **30 days** following the last application of **Result** unless **Result**, **Poast** or **Poast Plus**® herbicide is registered for use on the crop.

Restrictions and Limitations for Tank Mixes

(partial list)

Always read and follow all label directions when using any pesticide alone or in tank mixes. The most restrictive labeling applies.

DO NOT apply tank mixes to crops that have been subjected to stress conditions such as drought, flooding, frost or hail damage, high temperature stress or wilt, injury from herbicides or excess fertilizer or soil salts, wind injury, widely fluctuating temperatures, stress symptoms from disease, nematodes or insects, or cold temperatures when maximum daily temperature is below 70° F or soil temperature is below 60° F because weeds will not be actively growing and control may be reduced.

DO NOT apply tank mixes through any type of irrigation system.

Avoid drift to all other crops and non-target areas.

Follow rotational restrictions as provided on each herbicide's respective labeling.

Thoroughly clean sprayer before and immediately after applying these tank mixes.

For postemergence applications of **Result** plus atrazine, if there have been no previous soil applications to that crop, the maximum rate of atrazine from all sources is 2 pounds of atrazine per acre.

If there has been a previous soil application to that crop, **DO NOT** exceed a total of 2.5 pounds of active ingredient per acre, per calendar year.

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Conditions of Sale and Warranty

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

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

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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 THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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Buctril is a registered trademark of Bayer CropScience.

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Firstrate and Stinger are registered trademarks of Dow Agrosciences LLC.

Reflex is a registered trademark of Syngenta.

Thistrol is a registered trademark of Nufarm Americas, Inc.

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Based on: NVA 2009-04-033-0150

NVA 2009-04-033-0151

Supersedes: NVA 2009-04-033-0152

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709



The Chemical Company

Mixing Order

If an inductor is used, rinse it thoroughly after each component has been added. Maintain constant agitation during application.

1. Water. Begin by agitating a thoroughly clean sprayer tank half full of clean water.
2. Agitation. Maintain constant agitation throughout mixing and application.
3. Products in PVA bags. Place any product contained in water-soluble bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
4. Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, and suspo-emulsions)
5. Water-soluble products (such as **BRUSH-RHAP®**).
6. Emulsifiable concentrates (such as oil concentrate, when applicable).
7. Water-soluble additives (such as liquid fertilizers (28-0-0, 32-0-0), when applicable).*
8. Remaining quantity of water.

* If sprayable fluid fertilizer is used as the carrier.

Always perform the **Compatibility Test** before mixing into the spray tank. Also, when using a sprayable fluid fertilizer as the carrier, any product contained in PVA bags must first be completely dissolved in water before the contents can be added to the fertilizer mix.

V. RESTRICTIONS AND LIMITATIONS

- Maximum seasonal use rate: Refer to **Table 5**.
- Preharvest Interval (PHI): Refer to **Food/Feed Crop Specific Information**
- Restricted entry Interval (REI): 48 Hours
- **Arid (dry) conditions:** It is extremely important that the addition of a suitable Nonionic Surfactant, Oil, or sprayable fertilizer be used when applying **BRUSH-RHAP®**. The maximum application rate of **BRUSH-RHAP®** may be needed to control susceptible weeds in this environment.
- **Rainfast Period:** Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce effectiveness of **BRUSH-RHAP®**.
- **Stress:** Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result.
- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.
- Do not apply this product though any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.
- This product cannot be used to formulate or reformulate another pesticide product.

VI. FOOD/FEED CROP SPECIFIC INFORMATION

Retreatments may be made as needed; however, do not exceed a total of 4 pints of **BRUSH-RHAP®** per treated acre during a growing season. Do not reapply for a minimum of 30 days.

Do not use on bentgrass, susceptible grass pastures (such as carpetgrass, buffalograss, or St. Augustine grass), lezpedeza, wild winter peas, vetch, clover, and alfalfa pastures as injury will occur.

When perennial weeds are reaching maturity, mowing and allowing some regrowth will enhance control. Difficult to control weeds may require a repeat application.

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If grasses are grown for seed or for seed-down purposes, do not apply after grass reaches joint stage.

Crop Rotational Restrictions: The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil.

CROP	MINIMUM DAYS PLANT BACK INTERVAL (Areas > ½" rainfall or irrigation after application)*			MINIMUM DAYS PLANT BACK INTERVAL (Areas < ½" rainfall or irrigation after application)		
	2/3 – 1 pints/A	>1 - 3 ½ pints/A	>3 ½ pints/A	2/3 – 1 pints/A	>1 – 3 ½ pints/A	>3 ½ pints/A
	Corn	14	21	120	30	60
Cotton	21	45	120	30	90	120
Barley, Oats, Wheat and other small grains	14	21	120	21	60	120
Sorghum	14	21	120	30	60	120
Soybean	30	45	120	45	90	120
All other crops	120	120	DO NOT ROTATE	120	120	DO NOT ROTATE

*NOTE: A cumulative ½ inches of rainfall or irrigation must occur in 2 or less rainfalls and/or irrigations before calculating plantback interval.

Table 5.

Crop	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding ¹	Aircraft Application
Between Crop Applications	3 2/3 pints	4 ¾ pints	Yes	Yes
Pasture, Hay, Silage	2 1/2 pints	3/4 pints	Yes	Yes
Sorghum	2/3 pints	2/3 pints	Yes	Yes
Wheat	1 1/4 pints	2 pints	Yes	Yes
Sugarcane	4 pints	8 pints	Yes	Yes

¹Refer to "Food/Feed Crop Specific Information" for grazing and feeding restrictions. **PASTURES, RANGELAND AND GRASS (Hay, Silage)**

BRUSH-RHAP® is recommended for use for pasture (including pasture grown for hay), rangeland, grass grown for silage, fallow systems, Conservation Reserve Programs, and general farmstead (non-cropland only).

Refer to **Tables 1 and 2** for rate selection based on targeted weed or brush species. Some weed species will require tank for adequate control.

Rates above 2 ½ pints of **BRUSH-RHAP®** per acre are for spot treatments only. Retreatments may be made as needed; however, do not exceed a total of 4 ¾ pints of **BRUSH-RHAP®** per treated acre a growing season.

Uses described in this section also pertain to small grains (such as barley, corn, forage sorghum, oats, rye, sudangrass, or wheat) grown for pasture, hay, and silage only. Newly seeded areas including small grains grown for pasture or hay, may be injured if rates of **BRUSH-RHAP®** are greater than 1 1/4 pints per acre are applied.

In newly established hybrid Bermudagrass, Pangolagrass, and stargrasses (*Cynodon* spp.) use 1 to 2 pints of **BRUSH-RHAP®** per acre to control or suppress weeds after planting vegetative propagules (stolens) of hybrid bermudagrasses. In addition to the weeds listed in **Tables 1 and 2**, this rate of **BRUSH-RHAP®** will control or suppress annual sedges, broadleaf signalgrass, crabgrass, and goosegrass. Best results will be obtained if **BRUSH-RHAP®** is applied at the germinating stage of weeds. Under favorable conditions, this is usually 7-10 days after planting these grasses. Reduced control can be expected if weeds are allowed to reach 1" in height before application or if germination of weeds occurs 10 days after application.

Do not use on bentgrass, susceptible grass pastures (such as carpetgrass, buffalograss, or St. Augustine grass), lezpedeza, wild winter peas, vetch, clover, and alfalfa pastures as injury will occur.

When perennial weeds are reaching maturity, mowing and allowing some regrowth will enhance control. Difficult to control weeds may require a repeat application.

For pasture renovations, wait 3 weeks per 1 1/4 pints of **BRUSH-RHAP®** used per acre before interseeding or injury may occur.

If grasses are grown for seed or for seed-down purposes, do not apply after grass reaches joint stage.

Grazing and Feeding Non-Lactating Animals: There is no waiting period between treatment and grazing for non-lactating animals. Do not permit meat animals being finished for slaughter to graze treated fields within 30 days of slaughter.

Grazing and Feeding Lactating Animals: Do not graze lactating dairy animals within 7 days of treatment.

Dry hay and Silage: Treated grasses may be harvested for dry hay or silage but do not harvest within 7 days of treatment.

Pasture and Rangeland Tank Mixes

BRUSH-RHAP® may be applied in tank mixes with one or more of the following herbicides:

- Ally®
- Amber®

Pastures, Rangeland, and Grass (Hay, Silage) Restrictions:

- PHI for grass forage: 0 days
- PHI for grass hay: 7 days
- Maximum of 2 applications per year
- Minimum of 30 days between applications
- Do not cut forage for hay within 7 days of application

SORGHUM

Rates and Timings

Apply 2/3 pint of **BRUSH-RHAP®** per acre to sorghum in the 3-5 leaf stage (4"-8" tall.) For best

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performance apply when weeds are small (less than 3" tall).

Applications of **BRUSH-RHAP®** to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling leaves. These effects are usually outgrown within 10-14 days. Sorghum growing under conditions of stress such as high moisture, low fertility, and abnormal temperature may be more sensitive to applications of **BRUSH-RHAP®**. Do not use surfactants or oils with postemergence applications of **BRUSH-RHAP®** on sorghum crops. Do not use **BRUSH-RHAP®** if the potential for sorghum injury is not acceptable.

If sorghum is grown for pasture, hay or silage, refer to **Pastures, Rangeland and Grass (Hay, Silage)** under VI. **Food/Feed Crop Specific Information** for livestock grazing and feeding restrictions.

Do not apply **BRUSH-RHAP®** to sorghum grown for seed production.

Make no more than one postemergence application per growing season.

Do not make more than 1 application per crop cycle.

Do not harvest grain or fodder within 30 days of application.

Sorghum Tank Mixes

BRUSH-RHAP® may be applied in tank mixes with one or more of the following herbicides:

- | | | |
|-----------|---------------|---------|
| Atrazine | Laddock® S-12 | Peak® |
| Basagran® | Paramount® | Permit® |
| Buctril® | | |

Sorghum Restrictions:

- Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.
- PHI for sorghum grain and fodder: 30 days
- PHI for sorghum forage: 0 days

SUGARCANE

Applications of **BRUSH-RHAP®** can be made any time after the weeds have emerged and are actively growing but prior to the close-in stage of sugarcane. When possible, direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage. Application rates and timing are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

- For control of listed **ANNUAL** broadleaf weeds, apply 1 quart of **BRUSH-RHAP®** per treated acre.
- For suppression of listed **PERENNIALS**, apply 1 - 2 quarts of **BRUSH-RHAP®** per treated acre.

Retreatments may be made as needed, however, do not exceed 4 quarts of **BRUSH-RHAP®** per treated acre during a growing season.

SUGARCANE Tank Mixes: **BRUSH-RHAP®** may be tank mixed with one or more of the following herbicides: Asulox, Atrazine, Evik, Sencor, Sinbar

Sugarcane Restrictions:

- Do not harvest sugarcane prior to harvest maturity.
- Do not apply within 87 days of harvest.
- Do not graze lactating dairy animals within 7 days of treatment.
- Do not apply through any type irrigation system.
- Do not make more than one pre-emergence application per crop cycle.
- Do not make more than one post-emergence application per crop cycle.
- Do not exceed a total of 4 quarts of **BRUSH-RHAP®** per treated acre per crop cycle.
- If applied with other products containing 2,4-D, either as a tank mix or separately during same growing season do not exceed 4.0 lbs of 2,4-D acid equivalent per crop cycle.
- If applied with other products containing dicamba, either as a tank mix or separately during same growing season do not exceed 2.0 lbs of dicamba acid equivalent per crop cycle.

WHEAT (Fall- and Spring-seeded)

If small grains are grown for pasture or hay only, refer to **Pastures, Rangeland and Grass (Hay, Silage)**. Do not graze or harvest for livestock feed prior to crop maturity.

Do not use **BRUSH-RHAP®** in wheat underseeded with legumes.

EARLY SEASON APPLICATION:

Apply 1.0 pint of **BRUSH-RHAP®** per acre to wheat unless using one of the wheat specific programs below.

Early season applications to spring-seeded wheat must be made after tillering and before wheat reaches the 6-leaf stage.

Early season applications to fall-seeded wheat must be made after tillering and prior to the jointing stage. Care should be taken in staging early developing wheat varieties such as TAM 107, Madison, or Wakefield to be certain that the application occurs prior to the jointing stage.

SPECIFIC USE PROGRAMS FOR FALL-SEEDED WHEAT ONLY:

Up to 3/4 pints of **BRUSH-RHAP®** per acre may be applied on fall-seeded wheat after the wheat begins to tiller for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

PREHARVEST APPLICATIONS:

BRUSH-RHAP® can be used to control weeds that may interfere with harvest of wheat. Apply up to 1 1/4 pints of **BRUSH-RHAP®** per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy. A waiting interval of 14 days is required before harvest. Do not use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better. For control of additional broadleaf weeds or grasses, **BRUSH-RHAP®** may be tank mixed with other herbicides such as Ally or Gly Star™ Plus that are registered for preharvest use in wheat.

Preharvest use of **BRUSH-RHAP®** is not registered for use in California.

Table 6 - Wheat Tank Mixes

TANK MIX PARTNER	RATE PER ACRE
Aim™	0.3 ounce
Ally®	0.05 - 0.1 ounce
Amber®	0.14 - 0.28 ounce
Bronate®	0.75 - 1.5 pints
Buctril®	1 - 1.5 pints
Canvas®	0.2 - 0.4 ounce
Curtail™	2 - 2.67 pints
Dakota®	16 fluid ounces
Express®	0.083 - 0.167 ounce
Finesse®	0.167 - 0.33 ounce
Glean®	0.167 ounce
Harmony® Extra	0.167 - 0.33 ounce
Karmex®	0.5 - 1.5 pounds
Metribuzin (Sencor®)	0.25 - 0.375 pounds a.i.
Peak®	0.25 - 0.38 ounce
Stinger™	4 - 5.33 fluid ounces

¹ Do not use low rates of sulfonylurea herbicide, such as Ally®, Amber®, Canvas®, Express®, Finesse®, Glean®, Harmony® Extra, and Peak® on more mature weeds or on dense vegetative growth.

² Do not use as a tank mix treatment with Dakota or on Durum wheat.

³ Tank mixes with Karmex and metribuzin are for use in fall-seeded wheat only.

Fallow Systems, Conservation Reserve Programs, and General Farmstead

These uses are considered Food/Feed Crops when harvested, grazed or foraged. Consult section on **General Tank Mixing Information** for adjuvant restrictions and section on **Additives** for specific use directions.

Wheat Restrictions:

Postemergence:

- Limited to one postemergence application per crop cycle

Preharvest

- Limited to one preharvest application per crop cycle.

VII. NON-FOOD/FEED USE (LAND NOT HARVESTED, GRAZED OR FORAGED) – SPECIFIC INFORMATION

BETWEEN CROP APPLICATIONS

PREPLANT DIRECTIONS (POSTHARVEST, FALLOW, CROP STUBBLE, SET-ASIDE) FOR BROADLEAF WEED CONTROL

BRUSH-RHAP® can be applied postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply to weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See **V. Restrictions and Limitations** for the specified interval between application and planting to prevent crop injury.

Rates and Timings:

Apply 1 – 3 2/3 pints of **BRUSH-RHAP®** per acre. Refer to **Table 1** to determine use rates for specific targeted weed species. Retreatments may be made as needed; however, do not exceed a total of 4 pints of **BRUSH-RHAP®** per treated acre during a growing season. For best performance, apply **BRUSH-RHAP®** when annual weeds are less than 6" tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if **BRUSH-RHAP®** is applied when the majority of weeds have at least 4-6" of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage. The addition of liquid fertilizers (28-0-0, 32-0-0) at ½ GPA has shown to increase efficacy.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for **BRUSH-RHAP®**. For seedling control, a follow-up program or other cultural practices could be instituted.

There is a 30-day minimum application interval.

Between Crop Tank Mixes:

In tank mixes with one or more of the following herbicides, apply 1.0 - 1.25 pints of **BRUSH-RHAP®** per acre for control of annual weeds, or 1.25 - 4 pints of **BRUSH-RHAP®** per acre for control of biennial and perennial weeds

- Aim™
- Ally®
- Amber®
- Atrazine
- Cyclone®
- Finesse®
- Glyphosate (Gly Star™ Plus)
- Gramoxone® Extra
- Kerb™
- Paramount®
- Sencor®
- Tordon™ 22K
- Touchdown®

APPLICATIONS TO FALLOW GROUND PRIOR TO PLANTING COTTON

Rates and Timings

Apply **BRUSH-RHAP®** as a broadcast or spot treatment to emerged and actively growing weeds at the rate of 1 to 3 2/3 pints per acre. The most effective control of weeds occurs if application is made when weeds are in the 2-4 leaf stage and rosettes are less than 2" across

Cropping Restrictions

Refer to the **Crop Rotational Restrictions Table** in **Section V. RESTRICTIONS AND LIMITATIONS** for appropriate pre-plant application intervals for cotton.

Tank Mix Treatments

For control of grasses or additional broadleaf weeds, **OUTLAW** may be tank mixed with **CAPROL®**, **GRAMAXONE® Extra**, and glyphosate herbicides.

Fallow Ground Restrictions:

- Only labeled crops can be planted within 30 days of treatment.
- Limited to 2 applications per year.
- Minimum of 30 days between applications

FOREST MANAGEMENT

Do not apply under drip line of desirable trees or adjacent to desirable vegetation. Limited to one broadcast application per year.

Forest Site Preparation

Budbreak Spray: For control of alder, susceptible broadleaf weeds, and susceptible woody plants before planting forest seedlings, apply up to 2 quarts per acre in a minimum of 10 gallons spray mixture per acre. Apply as an oil spray (see **Mixing Instructions**) after alder buds break, but before foliage is 1/4 full size. A water spray including 2 to 4 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate may also be used.

Foliage Spray: To control alder and susceptible woody plants before planting forest seedlings, apply up to 2 quarts per acre in a minimum of 10 gallons spray mixture per acre. If desired, apply as a water spray including up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see "Mixing Instructions"). For best results, apply after alder foliage has reached full size.

Conifer Release: Some Conifers are more susceptible to **BRUSH-RHAP®** than others. Prior to application, consult your local Forestry agency about use pattern and history of use. To control alder, susceptible broadleaf weeds, and susceptible woody plants in young conifer stands, apply up to 2 pints per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray when 3/4 of the brush foliage has full size leaves and before new conifer growth reaches 2 inches in length. Such stages usually occur between early May and mid-June, but application timing should be based on growth stages of brush and conifers. Application may cause leader deformation and other conifer injury, but trees should overcome it during the next growing season.

To control tanoak, madrone, ceanothus, canyon live oak, and manzanita, and to release Douglas fir, hemlock, Sitka spruce or grand fir, apply up to 3 pints per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray including, if desired, up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see **Mixing Instructions**). Make application before new growth on Douglas fir is 2 inches long. To release ponderosa pine from the same species, treat before new pine growth begins in the spring. Addition of oil or oil concentrate may cause unacceptable injury to pines. For dormant applications in late winter or early spring for control of susceptible woody species such as alder, willow, poplars, cherry, vine maple, ceanothus, tanoak, madrone, and manzanita, apply up to 3 pints per acre in a minimum of 10 gallons spray mixture per acre. This dormant treatment should be applied in diesel oil, fuel oil, stove oil, or other suitable diluent such as water plus crop oil concentrate (see **Mixing Instructions**). Do not use in plantations where pine and larch are among the desired crop species.

To control hazel brush in the Lake states, apply up to 2 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray when new shoot growth of hazel is complete (usually mid-July).

After conifer species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir cease growth and harden off and brush is still actively growing in late summer, apply up to 3 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray to control certain competing hardwoods such as alder, aspen, birch, hazel and willow. However, if possible injury cannot be tolerated, do not use since this treatment may cause conifer injury.

Forest Roadsides: To control susceptible broadleaf weeds and woody plants on forest roadsides, apply 1 to 3 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray and, if desired, include up to 3 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate (see **Mixing Instructions**). Apply when sufficient foliage is present for absorption.

ROADSIDES; MEDIANS; HIGHWAY, RAILROAD, UTILITY AND PIPELINE RIGHTS-OF-WAY, VACANT LOTS, AROUND UTILITY INSTALLATIONS, TRANSFORMERS, PUMP HOUSES, AND BUILDINGS, STORAGE AREAS, FENCES, GUARDRAILS, LUMBER YARDS, INDUSTRIAL SITES, AIRPORTS, TANK FARMS, FARMSTEADS, AND SIMILAR NONCROP AREAS

Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

For control of many broadleaf weeds and small woody plants, apply 2/3 to 2 pints per acre. Use the high rate for woody plants. Applications may be as broadcast sprays, small area sprays or spot treatments. For small areas or spot spraying, use 2 fluid ounces per gallon of water and spray weeds to runoff. Regardless of the method of application, use adequate spray volume for full coverage of weeds. Preferred application timing is in the early spring when sufficient weeds have emerged, and when weeds are small and actively growing, but before weeds are too mature. Summer applications to older, drought-stressed weeds are less effective. However, weeds are more susceptible again in the fall when cooler, wetter conditions support active growth before a killing frost. For fall treatment of mature weeds or perennial weed regrowth, use up to 1.0 pints per acre. Several seasons of spring plus fall treatments may be necessary to control certain perennials. Use of oil sprays or the addition of spray adjuvants increases the risk of damage to desirable ground covers.

Plant Response: Bent grass, other warm season or southern grasses, alfalfa, clover, or other legumes may be killed or injured. Do not apply when grass is in boot to milk stage, or after heading begins, if grass production is desired. Do not apply to newly seeded areas until grass is well established. Reseeding is not recommended for at least 30 days following application.

Do not apply more than 4 3/4 pints/Acre for a single application. (Equivalent to 1.45 lbs 2,4-D acid and 1.09 lbs dicamba acid per acre).

NonCrop Area Restrictions:

Postemergence (annual and perennial weeds):

- Limited to 2 applications per year.
- Minimum of 30 days between applications.

Postemergence (woody plants)

- Limited to one application per year.

CONSERVATION RESERVE PROGRAMS AND GENERAL FARMSTEAD

BRUSH-RHAP® is recommended for use for Conservation Reserve Programs, general farmstead (non-cropland only), weed and brush control, or use in State Recognized Noxious Weed areas (non-cropland areas).

Refer to **Tables 1** and **2** for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Rates above 2 1/2 pints of **BRUSH-RHAP®** per acre are for spot treatments only.

Retreatments may be made as needed; however, do not exceed a total of 4 pints of **BRUSH-RHAP®** per treated acre during a growing season.

Limited to 2 applications per year. Minimum of 30 days between applications.

Farmstead and Fence-row Treatment Application Instructions

BRUSH-RHAP® may be applied using water or oil and water emulsions in spot application to control undesirable vegetation using handgun or similar types of application equipment. In addition to weed species listed in **Tables 1** and **2**, these treatments may be used to control or suppress woody plant species listed in **Table 7**.

To prepare soil and water emulsions, mix in the order and proportions indicated below.

The solution should remain milky colored without an oily layer on top when under agitation. If an oily layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

Do not exceed 40 gallons of spray solution per treated acre per application. 4 ¾ pints of **BRUSH-RHAP®** in forty gallons of spray solution contains 1.1 pounds acid equivalent of dicamba and 1.4 pounds acid equivalent of 2,4-D. Spray plants to wet. Do not allow this spray mix to contact desirable vegetation.

To control brush, briars, and weeds along fence-rows surrounding pasture and ranch lands, and fallow fields, use a tank mix of 1.5% **BRUSH-RHAP®**, 88.5% water, 10% diesel oil, and sufficient emulsifier (to mix the diesel and emulsifier). The diesel oil in this tank mix will damage or kill desirable grasses and should not be used in pastures or where damage to desirable species cannot be tolerated.

1. Water: Begin by agitating a thoroughly clean sprayer tank with the desired quantity of clean water. Maintain constant agitation during complete mixing procedure.
2. Emulsifier: Add 0.5% volume to volume of water.
3. **BRUSH-RHAP®**: add 1.5 gallons per 100 gallons of total intended solution.
4. Diesel Oil: Add 10 gallons per 100 gallons of total intended solution.

Maintain constant agitation during application. Under good agitation, the spray solution should be milky white with no oil layer on top. If oil layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

FOR SPRAYING FOLIAR APPLICATIONS:

1. Spray when leaves have reached full size but have not hardened due to drought or maturity.
2. Spray individual plants to wet with handgun.
3. For larger stems (up to 3" in diameter) and hard to control species, direct spray stream to base of stems to wet the stem at soil surface in addition to wetting the foliage.
4. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

FOR DORMANT BASAL APPLICATIONS:

1. Increase diesel oil content to 15% or 15 gallons of diesel oil per 100 gallons of total solution.
2. Spray in late winter and early spring before plants break dormancy.
3. Spray the bottom 24" of the target stem to wet on all sides.
4. For larger stems (up to 3" in diameter) and hard to kill species direct the spray solution to the base of target stems to wet the soil at the stem/soil junction in addition to wetting the stem.
5. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

FOR CUT SURFACE TREATMENTS:

Apply **BRUSH-RHAP®** in an undiluted state as a cut surface treatment to control unwanted trees and prevent sprouts of cut trees.

- Frill or Girdle Treatments: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with **BRUSH-RHAP®**.
- Stump Treatments: Spray or paint freshly cut surface with **BRUSH-RHAP®**. The cambium layer (the area adjacent to the bark) should be thoroughly wet. Treat stumps within 6 hours after cutting.

Table 7. The following list of trees and vines can be controlled on farmsteads and fencerows as foliar, basal, or cut surface treatments:

Alder

Ash

Aspen

Basswood	Honeylocust	Rabbitbrush
Beech	Honeysuckle	Redcedar, Eastern
Blackberry	Hornbeam	Rose, McCartney
Blackgum	Huckleberry	Rose, Multiflora
Cedar	Huisache	Sagebrush, Fringe
Cherry	Ivy, Poison	Sassafras
Chinquapin	Kudzu	Spruce
Cottonwood	Locust, Black	Sumac
Creosotebush	Maple	Sweetgum
Dewberry	Mesquite	Sycamore
Dogwood	Oak	Tarbrush
Elm	Oak, Poison	Willow
Grape	Olive, Russian	Witchhazel
Greenbriar	Persimmon, Eastern	Yaupon
Hawthorn (Thornapple)	Pine	Yucca
Hemlock	Plum, Sand (Wild Plum)	
Hickory	Poplar	

Weeds listed in this label:

ANNUALS	
Common Name	Scientific Name
Beebalm, Spotted	<i>Monarda punctata</i>
Broomweed, Common	<i>Gutierrezia dracunculoides</i>
Buckwheat, Wild	<i>Polygonum convulvulus</i>
Buffalobur	<i>Solanum rostratum</i>
Burdock	<i>Arctium spp.</i>
Buttercup, Corn	<i>Ranunculus arvensis</i>
Chickweed, Common	<i>Stellaria media</i>
Cockle, Corn	<i>Agrostemma githago</i>
Cocklebur, Common	<i>Xanthium strumarium</i>
Coreopsis, Plains	<i>Coreopsis tinctoria</i>
Croton, Woolly	<i>Croton capitatus</i>
Devilsclaw,	<i>proboscidea luisianica</i>
Dogfennel (Cypressweed)	<i>Eupatorium capillifolium</i>
Eveningprimrose, Cutleaf	<i>Oenothera lacinata</i>
Flax	<i>Linum catharticum</i>
Fleabane, Annual	<i>Erigeron annuus</i>
Flixweed	<i>Descurainia sophia</i>
Henbit	<i>Lamium amplexicaule</i>
Knotweed, Prostrate	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Lettuce, Prickly	<i>Lactuca serriola</i>
Mallow, Common	<i>Malva neglecta</i>
Mornigglory, Ivyleaf	<i>Ipomea hederacea</i>
Morningglory, Tall	<i>Ipomea purpurea</i>
Mustard, Annual	<i>Brassica spp.</i>
Mustard, Tansy	<i>Descurainia pinnata</i>
Pennycress, Field	<i>Thlaspi arvense</i>
Pepperweed, Virginia	<i>Lepidium virginicum</i>
Pigweed, Prostrate	<i>Amaranthus blitoides</i>

ANNUALS	
Common Name	Scientific Name
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>
Pigweed, Tumble	<i>Amaranthus albus</i>
Poorjoe	<i>Diodia teres</i>
Purslane, Common	<i>Portulaca oleracea</i>
Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Ragweed, Lance-leaf	<i>Ambrosia bidentata</i>
Ragweed, Western	<i>Ambrosia psilostachya</i>
Sedge	<i>Cyperus compressus</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Sneezeweed, Bitter	<i>Helenium amurum</i>
Sunflower, Common (wild)	<i>Helianthus annuus</i>
Thistle, Russian	<i>Salsola iberica</i>
BIENNALS AND PERENNIALS	
Common Name	Scientific Name
Bindweed, field	<i>Convolvulus arvensis</i>
Bittercress	<i>Cardamine spp.</i>
Buckeye	<i>Aesculus spp.</i>
Bullnettle	<i>Cnidoculus stimulosus</i>
Chicory	<i>Cichorium intybus</i>
Clover, Hop	<i>Trifolium aureum</i>
Dandelion	<i>Taraxacum officinale</i>
Dock, Curly	<i>Rumex crispus</i>
Elderberry	<i>Sambucus canadensis</i>
Goldenrod, Missouri	<i>Solidago missouriensis</i>
Goldenweed, Common	<i>Isocp, a cprpmopifolia</i>
Groundset	<i>Senecio vulgaris</i>
Honeysuckle, Hairy	<i>Lonicera</i>
Horsenettle	<i>Solanum carolinense</i>
Ivy, Poison	<i>Rhus radicans</i>
Knapweed, Black	<i>Centaurea nigra</i>
Knapweed, Russian	<i>Centaurea repens</i>
Knapweed, Spotted	<i>Centaurea maculosus</i>
Marshelder	<i>Ina annua</i>
Mesquite	<i>Prosopis juliflora</i>
Milkweed, Antelopehorn	<i>Asciepius</i>
Nightshade, Silverleaf	<i>Solanum elaeagnifolium</i>
Nightshade, Black	<i>Solanum nigrum</i>
Persimmon, Eastern	<i>Diospyros virginiana</i>
Rabbitbrush	<i>Chrysanthemus pulchellus</i>
Ragwort, Tansy	<i>Senecio jacobia</i>
Redvine	<i>Brunnichia ovata</i>
Sagebrush, Fringed	<i>Artemisia frigida</i>

ANNUALS	
Common Name	Scientific Name
Smartweed, Swamp	<i>Polygonum coccineum</i>
Sorrel, Red (Sheep Sorrel)	<i>Rumex acetosella</i>
Sowthistle, Perennial	<i>Sonchus arvensis</i>
Spurge, Leafy	<i>Euphorbia esula</i>
Starthistle, Yellow	<i>Centauria solstitialis</i>
Tallow Tree, Chinese	<i>Sapium sebiferum</i>
Thistle, Bull	<i>Cirsium vulgare</i>
Thistle, Canada	<i>Cirsium arvense</i>
Thistle, Musk	<i>Carduus nutans</i>
Thistle, Plumeless	<i>Carduus acanthoides</i>
Vetch	<i>Vicia spp.</i>
Yankeeeweed	<i>Eupatorium compositifolium</i>

Food/Feed Crop Uses

This product can be used on the following:

- Conservation Reserve Program Land
- Fallow Systems (Between Crop Application)
- General Farmstead
- Grain Sorghum
- Grass (Hay or Silage)
- Pastures
- Rangeland
- Sugarcane
- Wheat

Look inside for complete **Restrictions and Limitations** and **Application Instructions**

These crops are considered Food/Feed crops only when harvested, grazed, or foraged. Otherwise, they are considered non-Food/Feed uses.

CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions or presence of other materials. All such risks shall be assumed by the Buyer.

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