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Mr. Victor A. Dorr Hoechst Celanese Corporation Little Palls Centre One 2711 Centerville Road Wilmington, DE 19808

Dear Mr. Dorr:

Subject: Bugle Herbicide

EPA Registration No. 8340-40

Letter Dated May 25, 1994, Request To

Amend Registration To Permit an Additional Tank Mix with Pusilade DX Herbicide

The proposed subject amendment to the registration of the subject pesticide product use-patterns has been reviewed and found acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) provided that you:

o Submit five (5) printed copies of the final printed label before releasing the product for shipment.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA, Section 6(e). Your release for shipment of the product constitutes acceptance of this condition.

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

Sincerely yours,

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

Enclosure

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E.wilson:Diskette #10001a:06-01-94

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Revised: May 19, 1994 (Edition #7)

# RESTRICTED USE PESTICIDE DUE TO EYE IRRITATION

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

# **BUGLE® HERBICIDE**

FOR THE SELECTIVE POSTEMERGENCE CONTROL OF MONOCOT ANNUAL AND PERENNIAL GRASSES IN WHEAT, SOYBEANS, COTTON, PEANUTS AND ACREAGE CONSERVATION RESERVE (SET-ASIDE)

### ACTIVE INGREDIENT:

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TOTAL 100.00%

JUN 2

\* Equivalent to 0.67 pound of pure fenoxaprop-p-ethyl (d isomer) per gallon

ACCEPTED

ACCEPTED

\*\* Contains petroleum distillates

with COMMENTS In EPA Letter Dated

KEEP OUT OF REACH OF CHILDREN.

DANGER PELIGRO

Under the Federal Inaecticide. Fundicide, and Rodenticide Art as smeaded, for the pesticide registered under EPA Reg. No.

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

EPA Reg. No. 8340-40

EFA EST. NO.

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**NET CONTENTS:** 

HOECHST CELANESE CORPORATION Little Falls Centre One 2711 Centerville Road Wilmington, DE 19808 BEST AVAILABLE COPY

Hoechst 🔀

### STATEMENT OF PRACTICAL TREATMENT

If in eyes: Flush with plenty of water. Call a physician.
If swallowed: Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol.

If inhaled: Remove victim to fresh air. If not breathing, give

artificial respiration, preferably mouth to mouth. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

> For medical or environmental emergency, call 1-800-228-5635, ext. 132.

### PRECAUTIONARY STATEMENTS

### DANGER

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### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive. Causes irreversible eye damage. Harmful if swallowed, inhaled, or absorbed through skin.

Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or spray mist.

# Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F 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 barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, or viton  $\geq 14$  mils; shoes plus socks; protective eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# Engineering control statement:

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

# User Safety Recommendations

### Users should:

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

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## **ENVIRONMENTAL HAZARDS**

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This pesticide is toxic to fish. 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 apply when weather conditions favor runoff or drift. Do not contaminate arable land and/or water when disposing of equipment washwaters.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Do not store over 100°F or below 10°F. Do not use or store near heat or open flame.

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: Empty containers should be triple rinsed into the spray tank during the spray operation. 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.

### IMPORTANT NOTICE: DISCLAIMER

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Read "IMPORTANT NOTICE: DISCLAIMER" before buying or using. If terms are not acceptable, return at once unopened.

The directions for use of this product are believed to be reliable and should 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 timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, or use of this product in a manner inconsistent with its labeling, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

HOECHST CELANESE CORPORATION warrants only that the product conforms to the chemical description on the label and is reasonably fit for the purpose stated on the label when used in accordance with the directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable to HOECHST CELANESE CORPORATION and user assumes the risk of any such use. HOECHST CELANESE CORPORATION MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY. In no case shall HOECHST CELANESE CORPORATION be liable for consequential, special, indirect or incidental damages resulting from the use or handling of this product. The foregoing conditions of sale and warranty can be varied only by an agreement in writing signed by a duly authorized representative of HOECHST CELANESE CORPORATION.

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#### IMPORTANT INSTRUCTIONS ENCLOSED

FOR THE SELECTIVE POSTEMERGENCE CONTROL OF MONOCOT ANNUAL AND PERENNIAL GRASSES IN WHEAT, SOYBEANS, COTTON, PEANUTS AND ACREAGE CONSERVATION RESERVE (SET-ASIDE)

# GENERAL INFORMATION

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Bugle® Herbicide is an emulsifiable concentrate for use in selective postemergence control of annual and perennial grassy weeds in soybeans, cotton, peanuts, wheat, and acreage conservation reserve (set-aside). Thorough spray coverage of emerged grasses is important. Visible effects begin as a general chlorosis (yellowing) followed by death of the weed. Visible injury of the grasses is evident approximately 4-10 days after application (dependent upon environmental conditions); but complete kill of the target grass will take 12-21 days.

Because many monocot grass crops (such as sorghum and corn) are sensitive to Bugle Herbicide, avoid all direct or indirect contact to neighboring fields.

Bugle Herbicide does not control broadleaf weeds or sedges.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply until you have read the entire label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### INFORMATION ON HERBICIDE RESISTANT WEEDS

Repeated use of the same herbicide or related herbicides may result in rare, naturally resistant weeds multiplying to infestations that will affect yields. In areas with consistent use of the same herbicide or herbicide mode of action, crop rotation and applications of alternative herbicide families are encouraged to prevent and/or reduce annual grass resistance. For further information, contact a Hoechst Celanese Corporation representative or your local state extension services.

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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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

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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, butyl rubber ≥14 mils, nitrile rubber ≥14 mils or viton ≥14 mils; shoes plus socks; protective eyewear.

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. The Acreage Conservation Reserve (set-aside) is not within the scope of the WPS.

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# SOYBEANS, COTTON AND PEANUTS

### APPLICATION INFORMATION

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- Ground Application: Broadcast Refer to the Rate and Grass Recommendation Chart for proper application rates. Herbicide should be applied in a minimum of 10 gallons of water per broadcast acre. Flat fan or hollow cone nozzles are recommended, flood nozzles are not recommended for ground applications. Use a minimum pressure of 40 pounds per square inch. Under dense weed/crop canopies, high spray pressure is very important for obtaining thorough coverage; therefore, use higher spray pressure under these conditions. Spot Treatment - Bugle Herbicide may be applied for the control of grasses through knapsack sprayers or high-volume equipment utilizing handguns or other suitable nozzle arrangements in a 0.74% v/v solution with water (e.g., 1 quart per 34 gallons of water). Apply to actively growing grasses. Apply to the foliage of grasses on a spray-to-wet basis. DO NOT spray to the point of runoff. The spray gallonage should not exceed 25 gallons per acre. Spray coverage should be uniform and complete.
- B. Air Application: Calibrate the spray equipment prior to use. Bugle Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray coverage, use nozzles to provide 200-350 micron size droplets. DO NOT use raindrop nozzles. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi and wind speed not exceeding 10 mph to assure accurate application within the target area. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

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

### PRECAUTIONS TO BE TAKEN TO AVOID SPRAY DRIFT

Do not allow spray from aerial equipment to drift onto adjacent land or crops. When drift may be a problem, do everything possible to reduce spray drift, including the following:

- Do not spray if wind speeds are or become excessive. Do not spray if the wind is 10 mph or greater. If sensitive crops or plants are down wind, extreme caution must be used under all conditions. Do not spray if winds are gusty.
- Use extreme caution when conditions are favorable for drift (high temperatures, drought, low relative humidity), especially when sensitive crops are located nearby.
- Drift from aerial applications of the herbicide is likely to result in damage to sensitive plants adjacent to the treatment site. This damage can occur at levels below the concentrations which can be detected with chemical analysis.
- Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.
- Use the lowest number of nozzles practical with the largest possible orifice size within the specified range to obtain the minimum 5 gallon per acre spray volume. Application height and boom length should be set according to manufacturer's instructions to minimize drift.
- Reduce the volume of spray mixture by using higher flow rate nozzles. Using lower pressure with the appropriate nozzle to obtain higher volumes will also reduce spray drift.
- Apply as close to target plants as practical while maintaining a good spray pattern for adequate coverage.

### TIMING OF APPLICATION

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Bugle Herbicide will control grasses at most growth stages; but for optimum grass control, applications should be made during periods of rapid growth. Follow the recommendations for time of application listed on the Rate and Grass Recommendation Chart. Earlier applications of Bugle Herbicide (before all grasses have emerged) could result in late flushes of monocot grassy weeds in the treated area.

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# RATE AND GRASS RECOMMENDATION CHART

For use only in the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee and Texas.

Monocot Grassy Weeds	Maximum Height	Maximum Height
Annual Grasses	0.5 pt./acre (8.0 fl. oz./acre)	0.6 pt./acre (9.6 fl. oz./acre)
Giant Poxtail	3*	6"
( <u>Setaria faberii</u> ) Green Foxtail	3*	6*
( <u>Setaria viridis)</u> Volunt <b>ee</b> r Corn	10"	24*
(Zea mays) Wild Proso Millet	6*	10"
(Panicum miliaceum) Johnsongrass, Seedling	6*	12"
Sorghum halepense) Fild Cane/Shattercane Sorghum bicolor)	6"	12"
	1.0 pt./acre (16.0 fl. oz./acre)	1.2 pt./acre (19.2 fl. oz./acre
Bristle Foxtail (Setaria verticillata)	3"	6"
Purple Foxtail (Setaria viridia	3"	6 <b>*</b>
<u>robusta purpurea)</u> Robust Foxtail ( <u>Setaria viridis</u>	3*	6"
robusta alba) Sandbur		, v
(Cenchrus incertus) Yellow Foxtail	3•	₹ <b>6</b> *
(Setaria lutescens)	2*	6"

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	Mauinum Daiaht	Mauinum Weight
Monocot Grassy Weed Annual Grasses	Maximum Height  1.2 pt./acre (19.2 fl.os./acre)	Maximum Height  1.5 pt./acre (24.0 fl.os./acre)
Barnyardgrass	3"	6"
( <u>Echinochloa crus-qalli</u> ) Broadleaf Signalgrass	3*	6*
( <u>Brachiaria platyphylla)</u> Fall Panicum	3*	6-
( <u>Panicum dichotomiflorum)</u> Jungle Rice	3"	6"
( <u>Echinochloa</u> <u>colonum</u> ) Southwestern Cupgrass	3"	6*
( <u>Eriochloa gracilis)</u> Sprangletop	3*	6*
(Leptochloa sp.) Wild oats	3"	6*
( <u>Avena fatua</u> ) Witchgrass	3*	6*
(Panicum capillare) Wooly Cupgrass	3"	6*
( <u>Eriochloa villosa</u> ) Large Crabgrass	2*	6*
( <u>Digitaria sanguinalis</u> ) Smooth Crabgrass	2*	6*
( <u>Digitaria ischaemum)</u> Goosegrass	2*	6*
( <u>Eleusine indica</u> ) Itchgrass	2*	6"
( <u>Rottboellia exaltata</u> ) Texas Panicum	2*	6*
( <u>Panicum Texanum</u> ) Wirestem muhly	2*	6*
(Muhlenbergia frondosa)	·	<u> </u>
Perennial Grasses	1.0 pt./acre (16.0 fl.oz./acre)	
Johnsongrass from rhizomes (Sorghum halepense)	20*	·
	0.5 pt./acre (8.0 fl.oz./acre)	
Johnsongrass from rhizomes (Sorghum halepense) (Second application if needed)  (A timely cultivation may override the necessity for	20*	

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# RATE AND GRASS RECOMMENDATION CHART

For use only in the following states: Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachuseits, Michigan, Minnesota, Missouri (excluding Ripley, Butler, Stoddard, Scott, Mississippi, New Madrid, Pemiscot, and Dunklin Counties), Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia, West Virginia, and Wisconsin.

Manage Conserve Woods	Maximum Height	Maximum Height	
Monocot Grassy Weeds Annual Grasses	0.4 pt./acre (6.4 fl.oz./acre)	0.6 pt./acre (9.6 fl.oz./acre)	
Giant Foxtail (Setaria faberii)	3"	8"	
reen Foxtail	3"	8*	
<u>(Setaria viridis)</u> Volunteer Corn (Zea mays)	10*	24*	
Vild Proso Millet	6*	10"	
<u>Panicum miliaceum)</u> Johnsongrass, Seedling	6*	12*	
Sorghum halepense   Fild Cane/Shattercane  Sorghum bicolor	6*	12"	
	0.6 pt./acre (9.6 fl.oz./acre)	0.8 pt./acre (12.8 fl.oz./acre	
Bristle Foxtail ( <u>Setaria verticillata</u> )	3"	8*	
Purple Foxtail Setaria viridis	3"	8*	
robusta purpurea) lobust Foxtail	3**	4 8 <b>"</b>	
<u>Setaria viridis</u> <u>robusta alba)</u> andbur	3"	8-	
Cenchrus incertus)	2*	g-	

Recommend	ed Rate of Bugle Herbici	de
	Maximum Height	Haximum Height
Monocot Grassy Weeds Annual Grasses	0.8 pt./acre (12.8 fl.os./acre)	1.1 pt./acre (17.6 fl.oz./acre)
Barnyardgrass	3"	6"
( <u>Echinochloa crus-galli</u> ) Broadleaf Signalgrass	3*	8-
(Brachiaria platvphylla) Fall Panicum	3"	8=
(Panicum dichotomiflorum)	3*	8*
Jungle Rice (Echinochlos colonum)		-
Southwestern Cupgrass (Eriochloa gracilis)	3*	8"
Sprangletop (Leptochloa filiformis)	3*	8*
Wild oats	3.*	8"
( <u>Avena fatua</u> ) Witchgrass	3*	8 <b>"</b>
(Panicum capillare) Wooly Cupgrass	3*	8*
(Briochloa villosa)	2*	8"
Large Crabgrass (Digitaria sanguinalis)	_	<u>-</u>
Smooth Crabgrass (Digitaria ischaemum)	2*	8*
Goosegrass (Eleusine indica)	. 2"	8*
Itchgrass	2*	8*
( <u>Rottboellia exaltata</u> ) Texas Panicum	2*	8*
(Panicum Texanum) Wirestem muhly	2*	8"
(Muhlenbergia frondosa)		
Perennial Grasses	1.0 pt./acre (16.0 fl.os./acre)	•
Johnsongrass from rhizomes	20≂	
(Sorqhum halepense)		
	0.5 pt./acre (8.0 fl. os./acre)	
Johnsongrass from		
rhizomes (Sorghum halepense)		
(Second application if needed)	20*	
(A timely cultivation may	20	
override the necessity for a second		
application.)		

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### **ADDITIVES**

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Annual Grasses: Always add a nonphytotoxic oil concentrate or a nonionic surfactant when controlling annual grasses. The addition of nonphytotoxic oil concentrate to the spray solution at 1 quart per acre for ground applications and 1 pint per acre for aerial applications, or a nonionic surfactant at 1/4-1/2% by volume to the spray solution will improve the herbicidal activity of Bugle Herbicide on annual grassy weeds. Add a nonphytotoxic oil concentrate or a once-refined vegetable oil or soybean oil concentrate containing 15-20% approved emulsifiers. Crop oil concentrates vary in their viscosity; therefore, it is important to maintain constant agitation while the spray mixture is in the spray tank. You may use 1-2 quarts of 28% nitrogen solution with 1 quart of crop oil concentrate per acre.

Rhisome Johnsongrass: DO NOT include the above additives when controlling rhizome Johnsongrass. The increased speed of foliage burn resulting from the addition of crop oil concentrate or nonionic surfactants may reduce the translocation of Bugle Herbicide to the Johnsongrass roots and rhizomes.

### TANK MIX RECOMMENDATIONS FOR SO'IBEANS AND PEANUTS

Bugle Herbicide may be tank mixed with Basagran® Herbicide in a postemergence program for broader spectrum weed control in soybeans and peanuts. Bugle Herbicide may also be tank mixed with Blazer® Herbicide, Reflex® 2LC Herbicide, Pinnacle® Herbicide, Pinnacle® Herbicide, or Fusilade® 2000 Herbicide in soybeans only. Bugle Herbicide may be tank mixed with Butyrac® 2000 Herbicide in peanuts only. Tank mix applications are to be used only when both the annual grass and broadleaf weeds are in the proper stage of growth as specified on each respective herbicide label. When tank mixing, always follow the use directions in accordance with the respective label. No label dosage rates should be exceeded. Best results occur when weeds are actively growing.

**Special Note:** DO NOT apply Bugle Herbicide in tank mixtures with the above herbicides when the weeds are drought stressed or when the soybean or peanut plants show signs of injury or disease.

Water Volume and Spray Pressure

Ground Equipment: For the tank mix, use a minimum of 20 gallons per acre of total spray solution and a minimum pressure of 40 psi. Use standard high pressure hollow cone or flat fan nozzles. Do not use flood nozzles.

Aerial Equipment: For tank mixes, use a minimum of 5 gallons per acre of total spray solution and a minimum pressure of 40 psi.

Mixing: Fill the spray tank half full with water while the agitator is running. Add the recommended amount of Bugle Herbicide followed by the tank mix component. Then add the remaining amount of water.

# Tank Mix with Basagran Herbicide

Bugle Herbicide should be applied at a rate of 1.0 to 1.5 pints per acre (except when specific grassy weeds are small and actively growing as shown in the following special low rate tank mix table when lower rates may be used) and Basagran Herbicide at a rate of 1.5 to 2.0 pints per acre. The choice of rates of each product and additives is dependent on the weed size and weed spectrum present. Refer to the Basagran Herbicide label to identify the proper rate and additives for control of the species and size of the broadleaf weeds present.

The Bugle Herbicide rates for tank mixing with Basagran Herbicide are 1.0 pint per acre when the annual grassy weeds are 1 to 3 inches tall, and 1.5 pints per acre when the annual grassy weeds are 4 to 6 inches tall or less than 2 tillers (except when the special low tank mix rates are applicable). DO NOT use this tank mix if the annual grassy weeds have developed more than 2 tillers or are larger than 6 inches tall. For the control of shattercane 6 to 12 inches tall, volunteer corn 10 to 24 inches tall, and broadleaf weeds that are on the Basagran Herbicide label, tank mix Bugle Herbicide at a rate of 1.0 pint per acre with Basagran Herbicide at 1.5 to 2.0 pints per acre. DO NOT use this tank mix to control rhizome Johnsongrass.

Sequential applications (instead of a tank mix application) of Bugle Herbicide and Basagran Herbicide may be necessary if the stages of the grass and broadleaf weeds are not within tank mix label recommendations at the same time.

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Special Low Rates for Tank Mixing Bugle Herbicide with Basagran Herbicide when Specific Annual Grassy Weeds are Actively Growing and at the Stage of Growth Listed Below

	Maximum	Bugle Rate When Tank Mixed with Basagran*		
Species	Height	Pt./A	Fl.Oz./A	
Giant Foxtail	1-3*	0.6	9.6	
Green Foxtail	1-2"	0.6	9.6	
Seedling Johnsongrass	2-6"	0.6	9.6	
Shattercane	4-10"	0.6	9.6	
Volunteer Corn	2-10"	0.6	9.6	
Wild Proso Millet	2-6#	0.6	9.6	
Barnvardgrass	1-3"	0.8	12.8	
Sandbur	1-3"	0.8	12.8	
Yellow Foxtail	1-3"	0.8	12.8	
Wild Oats	1-3"	1.1	17.6	
Wirestem Muhly	1-3*	1.1	17.6	

<sup>\*</sup> These rates are recommended only for the annual grass species listed in the above chart and when the grasses are small and actively growing.

### Tank Mix with Blazer Herbicide

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Bugle Herbicide should be tank mixed at a rate of 1.5 pints per acre. Blazer Herbicide should be tank mixed at a rate of 1.5 to 2.0 pints per acre. In no instance should crop oil concentrate or a surfactant be used with this tank mix. This tank mix should not be used for the control of rhizome Johnsongrass.

The stage of growth of both the annual grassy weeds and the broadleaf weeds should conform to the directions on each product label. The tank mix of Bugle Herbicide plus Blazer Herbicide should not be applied after the annual grasses have begun tillering. Whenever the grass and broadleaf weeds are not in the proper stage of growth according to this tank mix label, a sequential application should be utilized. When Bugle Herbicide is applied first, a waiting period of 3 days is necessary before applying Blazer Herbicide. When Blazer Herbicide is applied first, a waiting period of 7 days is necessary before applying Bugle Herbicide.

<u>Special Note</u>: The mixture of Bugle Herbicide plus Blazer Herbicide may only suppress velvetleaf, as additives cannot be used with this tank mix.

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Tank Mix with Reflex 2LC Herbicide (Soybeans Only)

METHOD 1

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Tank Mix Application

Bugle Herbicide and Reflex 2LC Herbicide

(Annual grasses and broadleaf weeds are at the proper stage of growth for treatment as per the respective labels.)

A tank mix of Bugle Herbicide and Reflex 2LC Herbicide may be applied at the recommended rates and growth stages to susceptible annual grass and broadleaf weed species in a manner consistent with respective labels. Bugle Herbicide should be applied at a rate of 1.0 - 1.5 pints per acre and Reflex 2LC Herbicide at 1.0 - 1.5 pints per acre. The choice of rates for Bugle Herbicide is dependent on the weed size and weed spectrum present. Herbicide rate for tank mixing with Reflex 2LC Herbicide is 1.0 pint per acre when annual grassy weeds are 1-3 inches tall and 1.5 pints per acre when annual grassy weeds are 4-6 inches tall or less than 2 tillers. For the control of shattercane 6-12 inches tall, tank mix Bugle Herbicide at a rate of 1.0 pint per acre with Reflex 2LC Herbicide. The choice of rates for Reflex 2LC Herbicide is dependent on the weed size, weed spectrum and geographical locations. Refer to the Reflex 2LC Herbicide label for specific rates, geographical restrictions, and for a list of weeds controlled.

Use crop oil concentrate in the tank mix at 1 v/v (1 quart per 25 gallons of spray solution.)

- \* DO NOT use this tank mix if perennial grasses such as rhizome Johnsongrass are the predominant grass species to be controlled.
- DO NOT use this tank mix if the annual grassy weeds have developed more than 2 tillers or are larger than 6 inches tall as reduced annual grass control will occur.

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### METHOD 2

Sequential Application
Bugle Herbicide followed by Reflex 2LC Herbicide
(Annual and/or perennial grass weeds are at the proper growth stage for treatment, prior to broadleaf weed treatment.)

Apply Bugle Herbicide to annual and/or perennial grass weeds at the recommended rate and growth stage listed on this label.

When treating annual grass weeds, allow at least 3 days, and when treating perennial grass weeds allow at least 5 days to elapse prior to a Reflex 2LC Herbicide application. After the appropriate time interval has elapsed, apply Reflex 2LC Herbicide with an approved adjuvant to actively growing weeds at the recommended rate and growth stage. Refer to the Reflex 2LC Herbicide label for specific rates, geographical restrictions, and for a list of weeds controlled.

# METHOD 3

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Sequential Application

Reflex 2LC Herbicide followed by Bugle Herbicide

(Broadleaf weeds are at the proper growth stage for treatment, prior to annual and/or perennial grass weed treatment.)

Apply Reflex 2LC Herbicide with an approved adjuvant to susceptible broadleaf weeds at the recommended rate and growth stage listed on the Reflex 2LC Herbicide label. Refer to the Reflex 2LC Herbicide label for specific rates, geographical restrictions, and for a list of weeds controlled.

A sequential application of Bugle Herbicide may be made following a Reflex 2LC Herbicide application when annual or perennial grass weeds resume active growth indicated by the development of a new leaf. Follow the recommended rates and growth stages listed on the Bugle Herbicide label.

SPECIAL NOTE: Tank mix applications can result in increases in crop injury as compared to either product used alone.

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# Tank Mix with Pinnacle Herbicide (Soybeans Only)

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Bugle Herbicide may be tank mixed with Pinnacle Herbicide for broader spectrum weed control. The application rate for Pinnacle Herbicide is 0.25 ounce per acre. Refer to the rate chart below for the Bugle Herbicide use rates. This tank mix application should be made to grasses in the 2-leaf to 2-tiller stage of growth. Sequential applications may be necessary if the stages of growth of the grass and broadleaf weeds are not within the recommended timing of application. It is recommended that a non-ionic surfactant at a rate of 0.125-0.250% v/v be added to this tank mix. DO NOT exceed 1 pint of crop oil concentrate per acre. Refer to the Pinnacle Herbicide label for additional information.

Species	Maximum Height	Bugle Herbicide Rates (Pt./A) When Tank Mixed with Pinnacle Herbicide (0.25 oz.)
Giant Foxtail	5*	0.7 pt.
Volunteer Corn	24*	0.7
Seedling Johnsongrass	10"	0.7
Green Foxtail	4"	0.7
Wild Proso Millet	10=	1.0
Shattercane	12*	1.0
Barnyardgrass	8*	1.0
Wild Oats	6"	1.0
Wooly Cupgrass	6"	1.0
Yellow Foxtail	4"	1.0
Sandbur	6-	1.0

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# Tank Mix with Pinnacle Herbicide Plus Classic Herbicide (Soybeans Only)

Bugle Herbicide may be tank mixed with Pinnacle Herbicide plus Classic Herbicide for broader spectrum weed control. The application rate for Pinnacle Herbicide is 0.25 ounce per acre plus Classic Herbicide at 0.25 ounce per acre. Refer to the rate chart below for the Bugle Herbicide use rates. This tank mix application should be made to grasses in the 2-leaf to 2-tiller stage of growth. Sequential applications may be necessary if the stages of growth of the grass and broadleaf weeds are not within the recommended timing of application. Refer to the Pinnacle Herbicide and Classic Herbicide labels for additional information.

Species	Maximum Height	Bugle Herbicide Rates (Pt./A) When Tank Mixed with Pinnacle Herbicide (0.25 oz.)
Giant Foxtail	5*	1.0 pt.
Volunteer Corn	24"	1.0
Seedling Johnsongrass	10*	1.0
Green Foxtail	4"	1.0 .
Wild Proso Millet	10*	1.1
Shattercane	12*	1.1
Barnyardgrass	8*	1.2
Wild Oats	6*	1.2
Wooly Cupgrass	6*	1.2
Yellow Foxtail	4"	1.2
Sandbur	6*	1.2

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# Tank Mix with Pursuit Herbicide (Soybeans only)

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A tank mix of Bugle Herbicide and Pursuit Herbicide may be applied for annual grass and broadleaf weed control in soybeans. The recommended rate for Pursuit Herbicide is 4 ounces per acre when the broadleaf weeds are actively growing and before they exceed a height of 3 inches. Refer to the following rate chart for the Bugle Herbicide rates recommended for this tank mix. It is recommended that an EPA approved nonionic surfactant at a rate of 0.25% v/v be added to this tank mix or add 28% nitrogen solution at 1-2 quarts per acre with 1 quart of COC per acre.

Species	Maximum Height	Bugle Herbicide Rate When Tank Mixed with Pursuit Herbicide		
		Pt./acre	Fl. Oz./acre	
Giant Foxtail	6*	0.6	9.6	
Volunteer corn	24"	0.6	9.6	
Wild Proso Millet	10*	0.6	9.6	
Seedling Johnson Grass	10-	0.6	9.6	
Shattercane	12*	0.6	9.6	
Green Foxtail	6*	0.8	13.0	
Yellow Foxtail	3*	0.8	13.0	
Barnyardgrass	-6"	1.0	16.0	
Sandbur	6*	1.0	16.0	
Wild Oats	6*	1.2	19.2	
Wirestem Muhly	6*	1.2	19.2	

When the annual grassy weed species and the broadleaf weeds are not in the proper growth stage for this tank mix treatment, a sequential application of Bugle Herbicide and Pursuit Herbicide is recommended.

# 13010

# Tank Mix with Galaxy Herbicide (Soybeans only)

Bugle Herbicide may be tank mixed with Galaxy® Herbicide for broader spectrum weed control. The application rate for Galaxy Herbicide is 2 pirts per acre when the broadleaf weeds are actively growing and do not exceed the maximum height as identified on the Galaxy Herbicide label. Refer to the following rate chart for the Bugle Herbicide rates recommended for this tank mix.

Species	Maximum Height	Fl. Oz./acre
Giant Foxtail	3"	16
Volunteer Corn	10"	16
Seedling Johnsongrass	10"	16
Green Foxtail	3"	16
Wild Proso Millet	6"	18
Shattercane	10 <b>"</b>	18
Barnyardgrass	3#	19
Sandbur	3#	19
Wooly Cupgrass	3#	19
Yellow Foxtail	3"	. 19
Wild Oats	3#	19

<u>Do not exceed</u> more than 1 pint per acre of an EPA approved crop oil concentrate. Refer to the Galaxy Herbicide label for additional information.

# Tank Mix with Butyrac 200 (peanuts only)

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Bugle Herbicide may be tank mixed with Butyrac 200 for broader spectrum weed control in peanuts. Bugle Herbicide should be applied at 1.5 pints per acre and Butyrac 200 should be applied at 0.8-1.0 pint per acre. Follow the Butyrac 200 label for the correct rate to apply. This tank mix application should be made 2 to 12 weeks following the planting of the peanuts. Apply when the weeds are small and actively growing.

The tank mix of Bugle Herbicide plus Fusilade 2000 Herbicide may be applied in combination with Reflex 2LC, Basagran, or Blazer Herbicides as described on this and the Fusilade 2000 Herbicide labels. If there are any differences in labeling, the most restrictive labeling applies. DO NOT tank mix with Reflex 2LC, Basagran, or Blazer Herbicides when rhizome Johnsongrass is the predominant weed problem.

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### TANK MIX RECOMMENDATIONS FOR SOYBEARS AND COTTON

# Tank Nix with Fusilade 2000 Herbicide and Fusilade DX Herbicide

For improved control of Johnsongrass and/or annual grass, Bugle Herbicide may be tank mixed with Fusilade 2000 Herbicide and Fusilade DX Herbicide. When rhizome Johnsongrass is the predominant grassy weed to be controlled, Bugle Herbicide should be applied at a rate of 7.0 fluid ounces per acre with Fusilade 2000 at 12.0 fluid ounces per acre or Fusilade DX at 6 to 12 fluid ounces per acre. When annual grasses are the predominant grassy weeds, Bugle Herbicide should be applied at a rate of 8.2 fluid ounces per acre with Fusilade 2000 at 9.6 fluid ounces per acre or Fusilade DX at 4.5 to 8.0 fluid ounces per acre. Tank mix applications are to be used only if both annual grass and rhizome Johnsongrass are at the proper stage of growth as specified on each respective label.

For all ground applications, use crop oil concentrate in the tank mix at 1 to/v (1 quart per 25 gallons of spray solution) or a nonionic surfactant at 1/4 to/2 to/v. For aerial applications, use crop oil concentrate at 1 pint per acre.

# SPECIAL NOTES FOR SOYBEANS, COTTON AND PEANUTS

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- Annual ryegrass (<u>Lolium</u> sp.), quackgrass (<u>Agropyron repens</u>) and Bermudagrass (<u>Cynodon dactylon</u>) are not controlled by Bugle Herbicide applied alone.
- 2. Rainfall within one hour of an application may cause a reduction in grass control.
- If a new flush of grass occurs, either a timely cultivation or a second application of Bugle Herbicide may be necessary.
  - DO NOT make more than two applications of Bugle Herbicide per growing season, and DO NOT apply more than 1.5 pints per acre per growing season.
- 4. DO NOT cultivate within four days before or after a Bugle Herbicide application.
- 5. ALWAYS clean sprayer thoroughly before and after any pesticide application.
- 6. As a spot treatment, apply Bugle Herbicide in a 0.74% v/v solution with water (e.g., 1 quart per 34 gallons of water). (See instructions for use in the Ground Application Section.)
- 7. Bugle Herbicide is not phytotoxic to soybeans, cotton or peanuts at any growth stage. But for best results, it should be applied according to the development of the annual grassy weeds as noted in the rate and grass recommendation chart.

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- 8. DO NOT graze or feed treated forage, hay, straw, or vines.
- 9. Application of Bugle Herbicide to grasses under stress (e.g., drought), may result in reduced control. Foxtail that have rolled leaves (onion leaf) should not be sprayed until soil moisture improves.
- 10. DO NOT plant any rotational crop in a Bugle Herbicide treated field for 30 days after application.
- 11. DO NOT apply Bugle Herbicide less than 90 days before harvesting soybeans, 60 days before harvesting peanuts, and 40 days before harvesting cotton.
- 12. DO NOT apply this product through any irrigation system.

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- 13. The application of any pesticide (other than those listed on this label) made within 7 days of the Bugle Herbicide application causing stress to the target grass may reduce the effectiveness of the Bugle Herbicide application.
- 14. Read and follow restrictions and limitations on the Basagran Herbicide, Reflex 2LC Herbicide, Blazer Herbicide, Pinnacle Herbicide, Classic Herbicide, Pursuit Herbicide, Fusilade 2000 Herbicide, Butyrac 200, and Galaxy Herbicide labels as applicable. The most restrictive labeling applies in tank mixes.
- 15. When spraying no-till soybeans or dense weed stands, use 20 gallons of spray solution per acre.

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## WHEAT

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Bugle Herbicide is a postemergence herbicide for the control of green and yellow foxtail (pigeongrass), volunteer and wild millet species, and wild oats in hard red spring wheat and winter wheat. When applying to wheat, Bugle Herbicide MUST be tank mixed with MCPA Herbicide. The rate of MCPA Herbicide (4 lb./gal. formulation) is 12 fluid ounces per acre. Failure to tank mix Bugle Herbicide with MCFA Herbicide will cause injury to the wheat. DO NOT apply to durum wheat or barley.

## APPLICATION INFORMATION

Bugle Herbicide, when applied as recommended in the following Rate Recommendation Chart, controls the listed annual grassy weeds.

Ground Application: DO NOT apply when winds are gusty, or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Bugle Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. Apply a minimum of 10 gallons of spray solution per acre, using a spray pressure of 30-40 psi with flat fan nozzle tips. DO NOT apply with hollow cone type insecticide or other nozzles that produce a fine droplet spray. Under dense weed/crop canopies, high spray volume (15-20 gpa) is very important for obtaining thorough coverage.

	RAT	B RECONMENDA	TION CHART		
Products	Green Foxtail	Foxtail Millets	Yellow Foxtail	Proso Millet	Wild Oats
<u> </u>	P)	uid Ounces o	f Bugle Herb	cide Per A	cre
Bugle plus MCPA Bugle plus MCPA	6	6	6	6	15.5
plus Banvel® Bugle plus MCPA	6	6	6	6.	•
plus Buctril® Bugle plus MCPA	6	7.6	7.6	7.6	•
plus Ally® Bugle plus MCPA	6	6	7.6	7.6	*
plus Harmony Extra*	6	6	7.6	7.6	15.5
Bugle plus MCPA plus Expresso	6	6	7.6	7.6	15.5

<sup>\*</sup> These tank mixes are not recommended for wild oat control.

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### TIMING OF APPLICATION

The time of application is determined by the growth stage of the wheat and the grassy weed species. Apply Bugle Herbicide to wheat from the 3-leaf stage to the end of tillering stage of growth. DO NOT spray after wheat jointing begins. Bugle Herbicide will control susceptible grassy weeds from the 2-leaf stage to the 2-tiller stage of growth. Applications should be made to young, actively growing weeds. Bugle Herbicide has no effect via the soil and will only control emerged grassy weeds.

### TANK MIX COMBINATIONS

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Bugle Herbicide may be tank mixed with several broadleaf herbicides for annual grass and broadleaf weed control in hard red spring wheat and winter wheat only. Refer to the Rate Recommendation Chart for the approved broadleaf tank mix partners and the correct rate of Bugle Herbicide. The <a href="maximum">maximum</a> use rates for the broadleaf herbicides are as follows:

2.0 fl.oz./A
4.0 fl.oz./A
0.3 oz./A
0.17 oz./A
0.1 oz./A
16 fl.oz./A

\* The addition of Buctril 2EC Herbicide to Bugle Herbicide may cause temporary wheat yellowing and/or stunting.

Refer to the specific product labels for all use and precautionary statements.

### MOISTURE EFFECTS ON ANNUAL GRASSY WEED CONTROL

Foxtail (pigeongrass) can be controlled well over a wide range of soil moisture conditions. However, foxtail under drought stress exhibits rolled leaves ("onion leaf") and should not be sprayed as poor control may result.

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### NOTES FOR HARD RED SPRING WHEAT AND WINTER WHEAT

- DO NOT apply to the following crops: durum wheat, barley, rye or oats.
- 2. Rainfall within 1 hour of application may cause a reduction in weed control.
- 3. DO NOT apply more than 1 application of Bugle Herbicide in a growing season to hard red spring wheat or winter wheat.
- 4. DO NOT apply Bugle Herbicide within 70 days of harvesting wheat.
- 5. DO NOT apply this product through any type of irrigation system.
- 6. DO NOT apply this product aerially.
- DO NOT tank mix Bugle Herbicide with other broadleaf herbicides, surfactants, or liquid fertilizers unless specifically recommended on this label.
- 8. Cool, wet conditions at the time of application may result in temporary stunting or chlorosis of the wheat.

### ACREAGE CONSERVATION RESERVE (SET-ASIDE)

Bugle Herbicide may be used to control annual grassy weeds in acreage conservation reserve (set-aside) acres. This acreage is often seeded to the following cover crops: clover, alfalfa, tall fescue, bromegrass, and ryegrass. Special note: Timothy and orchardgrass are sensitive to Bugle Herbicide. The cover crops listed above have excellent tolerance to Bugle Herbicide at 12-16 fluid ounces per acre. Select the proper rate from the Rate and Grass Recommendation Chart found in the Soybean Section of this label.

## SPECIAL NOTES:

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- 1. DO NOT harvest or graze cover crops treated with Bugle Herbicide.
- DO NOT apply to cover crops such as oats, sorghum, sudangrass, and Timothy as injury may occur.

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