264-1073



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460

1 8 2013

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 8, 2013

George Sabbagh Bayer CropScience LP P.O. Box 12014 Research Triangle Park, NC 27709

Subject: Notification per PR Notice 98-10 (add CA Prop 65 statement, update S&D) Puma Ultra Herbicide EPA Reg. No. 264-1073 Application Dated December 5, 2012

Dear Mr. Sabbagh:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the subject product. The Registration Division (RD) has conducted a review of this request and finds that the action falls within the scope of PRN 98-10. The label submitted with the application has been date-stamped "Notification" and will be placed in our records.

If you have any questions, please contact Mindy Ondish at (703)605-0723 or at ondish.mindy@epa.gov.

Sincerely,

Mundy andith, for

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

Please read instructions on (	wyerse before completing fam	m	Form Approve	d. OMB No. 2070	Print Form
\$epa	United St Environmental Prot Washington, C	ection Agency		Registratio	OPP Identifier Number
	Appli	cation for Pes	ticide - Sectio	n I	
1. Company/Product Numbe 264-1073			PA Product Manage Kathryn V. Mor		3. Proposed Classification
4. Company/Product (Name) PUMA ULTRA H		PM	23		
5. Name and Address of Ap Bayer CropScience		709 <b>(b)(</b>	Expedited Review	imilar or identical	with FIFRA Section 3(c)(3) in composition and labeling
Check if this	is a new address	Pr	oduct Name		
		Section			· ·
X Amendment - Explain Resubmission in resp Notification - Explain	onse to Agency letter dated_		Final printed lai Agency letter d "Me Too" Appl Other - Explain	ication.	JAN 08 2013
Proposition 65 State No REG. FEE	CIDE (264-1073): Amend ment to the Label and Re abbagh: <u>george.sabbagh</u>	evise the Storage <u>@bayer.com</u> ; Offi	and Disposal Sec	tion (See Additi	onal Page for details).
1. Material This Product Wil	Re Restand by	Section	- 111		
Child-Resistant Peckeging Yes* No * Certification must be submitted	Unit Packaging Yes No If "Yes" No. p Unit Packaging wgt. contr	Per If "Yes"	No. per No. per t container	G Pi	Itainer letal astic less aper ther (Specify)
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1. Contact Point <i>Complete</i> Name George J. Sabbagh	items directly below for ident	Title Regulatory M		Tel	ephone No. Finclude Area Code) 9.549.2589 C C C C C C
	ments I have made on this for ly knowingly false or misleadir				6. Dete Application Received CCCC (Stamped) CC
2. Signature E. J. Sallor		3. Title Regulatory N	Manager		
4. Typed Name George J. Sabbagh	· · · ·	5. Date De	ecember 5, 201	2	

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

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Yellow - Applicant Copy

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# PUMA ULTRA HERBICIDE EPA Reg. No. 264-1073

#### Section II - Continued

As allowed by PR Notice 98-10, we are notifying the Agency of minor labeling amendments for PUMA ULTRA HERBICIDE (264-1073). The following is a summary of the proposed Changes:

- <u>Proposition 65 language</u>: As required by California Proposition 65, the following statement has been added to the label, "This product contains a chemical known to the state of California to cause developmental harm." The sentence was added on Page 11.
- <u>Storage and Disposal Section</u>: The directions were expanded to capture the handling of various types of containers. This language is consistent with the guidance in PR Notice 2007-4 and EPA's alternative language acceptance letter to Bayer CropScience dated November 10, 2009 (Enclosure). The section was moved to Page 9.

"This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA."

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# Bayer CropScience

Document Processing Desk Office of Pesticide Programs (7504P) U.S. Environmental Protection Agency Room S4900 One Potomac Yard 2777 S. Crystal Drive Arlington, VA 22202

Attention: Ms. Kathryn V. Montague Registration Division (7505P) Program Services Branch Room S-9263 BAYER E R

Date: 12/05/2012

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Bayer CropScience 2 T.W. Alexander Drive P. O. Box 12014 RTP, NC 27709 Phone: (919) 549-2589

Subject: PUMA ULTRA HERBICIDE (264-1073): Amendment by Notification (PR Notice 98-10) to Add the Required California Proposition 65 Statement to the Label and Revise the Storage and Disposal Section.

#### Dear Ms. Montague,

As allowed by PR Notice 98-10, we are notifying the Agency of minor labeling amendments for PUMA ULTRA HERBICIDE (264-1073). The following is a summary of the proposed Changes:

- <u>Proposition 65 language</u>: As required by California Proposition 65, the following statement has c c c c c been added to the label, "This product contains a chemical known to the state of California to cause developmental harm." The sentence was added on Page 11.
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In support of this action, you will find the following:

- Application Form 8570-1(and additional page for Section II)
- One copy of the updated label

- One copy of the updated Label shaded
- One copy of Storage and Disposal language approved by the Agency

Thank you for your consideration. If you have any questions or need additional information feel free to contact me by email (george.sabbagh@bayer.com) or by phone (cell: 913.231.6291).

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Sincerely,

George J. Sabbagh, Ph. D. Registration Product Manager, Herbicides

# NOTIFICATION

# PUMA<sup>®</sup> ULTRA HERBICIDE

JAN 08 2013

FOR SELECTIVE POSTEMERGENCE CONTROL OF GREEN AND YELLOW FOXTAIL (PIGEONGRASS), VOLUNTEER AND WILD MILLET SPECIES, BARNYARDGRASS, WILD OAT IN WHEAT (including Durum Wheat) and BARLEY

ACTIVE INGREDIENT: fenoxaprop-p-ethyl: (+)-ethyl 2-[4-[(6-chloro-2-benzoxazolyl)

oxy]phenoxy]propanoate.....

**INERT INGREDIENTS:\*\*....** 

......<u>91.21%</u> 100.00%

.8.79%\*

TOTAL:

\* Equivalent to 0.75 pound of pure fenoxaprop-p-ethyl (d isomer) per gallon \*\* Contains petroleum distillates

# EPA Reg No. 264-1073

EPA Est. No.

# KEEP OUT OF REACH OF CHILDREN DANGER - PELIGRO

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

For <u>MEDICAL</u> And <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT</u> <u>USE</u> Information Call 1-866-99BAYER (1-866-992-2937)

# FIRST AID

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.					
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.					
	Call a poison control center or doctor for treatment advice.					
IF SWALLOWED:	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 anything by mouth to an unconscious person.					
IF ON SKIN OR CLOTHING:	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.					

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

**NOTE TO PHYSICIAN:** Possible mucosal damage may contraindicate the use of gastric lavage. May pose an aspiration pneumonia hazard.

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# DANGER

Contains Petroleum Distillate.

Corrosive. Causes irreversible eye damage. Causes skin irritation. Harmful if absorbed through skin. Harmful if swallowed? Do hot get in eyes or on skin or clothing. Wear protective eyewear (goggles, face shield, or safety glasses).

Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for we shables exist, 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 thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco.
- · Remove and wash contaminated clothing before reuse.
- Remove PPE immediately after handling this product. Wash the pesticide off of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates or nontarget plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

# **GENERAL INFORMATION**

PUMA® Ultra Herbicide is a postemergence herbicide for the control of green and yellow foxtail (pigeongrass), volunteer and wild millet species, barnyardgrass and wild oat in wheat (including durum wheat) and barley.

# **DIRECTIONS FOR USE**

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

Do not use this product until you have read the entire label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

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

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry 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 24 hours.

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, wear: coveralls over long-sleeved shirt and long pants; socks and chemical resistant footwear. Wear goggles or face shield, and chemical resistant gloves (such as nitrile, butyl, neoprene, and/or barrier laminate).

#### APPLICATION INFORMATION

#### **Application Information**

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 ensure consistent weed control, apply PUMA Ultra Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern.

#### Application Methods

**Ground Application:** Ten (10) gallons of spray solution per acre is recommended. Under conditions where darge grass weads or dense weed populations are present or adverse environmental conditions exist, a greater spray volume of 15 - 20 gallons of spray solution per acre is required for best weed control. A minimum of 5 gallons of spray solution may only be used under conditions that are ideal for weed control and wild oat populations are low. Use a recommended spray pressure of 40 psi with flat-facepozzle tips spaced 10 to 20 inches apart across the boom. A ground speed of 10 mph or less is suggested. To get uniform spray coverage, use nozzles to provide 200 to 350 micron size droplets. DO NOT apply with hollow cone type nozzles or other nozzles that produce a fine displet spray.

Aerial Application: Calibrate the spray equipment prior to use. PUMA Ultra 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 to 350 micron size droplets. EQ 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

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nozzles at a pressure of 40 psi or a pressure recommended by the manufacturer of the nozzles used. 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.

#### Application Timing

#### Wheat

Apply PUMA Ultra Herbicide to the crop from emergence up to 60 days prior to harvesting wheat in the states of Minnesota, Montana, North Dakota, and South Dakota. Apply PUMA Ultra Herbicide on wheat within 70 days of harvest in other states.

#### Barley

Apply PUMA Ultra Herbicide to the crop from emergence up to the 5-leaf stage. Do not spray barley after jointing begins. Apply PUMA Ultra Herbicide up to 57 days of harvesting barley.

To avoid potential cereal grain injury, PUMA Ultra Herbicide should not be applied 2 days prior to or after freezing temperatures. Avoid applications for 2 days following abrasive winds or hail.

#### Weed Application Timing

PUMA Ultra Herbicide has no effect via the soil and will only control emerged grass weeds. Herbicide performance can be negatively impacted by environmental conditions, weed populations and tank mix partners. Applications should be made to young, vigorously growing weeds.

PUMA Ultra Herbicide will control susceptible grass weeds in the 1-leaf (fully expanded) to 2-tiller stage of growth. Blackgrass can be controlled over a wide range of growth stages, from the 1-leaf (fully expanded) through the advanced tillering stage. Windgrass will be controlled from emergence to a height of 3 inches.

#### The following conditions will result in optimum wild oat control:

1. Adequate soil moisture which occurs under normal rainfall in wheat or barley following a fallow year.

2. Temperatures lower than 85° F for several days prior to application.

Low soil moisture levels, low humidity, and high temperatures prior, during or following application may reduce wild oat and foxtail control provided by PUMA Ultra Herbicide.

Foxtail under drought stress will exhibit rolled leaves ("onion leaf") and should not be sprayed as poor control may result. Apply PUMA Ultra Herbicide when conditions improve.

PUMA Ultra Herbicide, when applied as recommended, controls the annual grass weeds listed in Table 1 below at rates indicated.

# Table 1

## **RATE RECOMMENDATION CHART**

#### for Grass Weed Control

Grass Weed Species, Common Name	Grass Weed Species, Scientific Name	Rate, Pints per Acre (Fluid Ounces/Acre)	Tankmix Table
Green foxtail	Setaria viridis		
Foxtail millets (volunteer), common,	Setaria italica	.44	See Table 2
Siberian, Hungarian, German millet		(7)	i c
Volunteer corn	Zea mays	·	ι ς ιιι <b>ι</b> ς ι
Yellow foxtail	Setaria pumila	0.53	See Table 3
Proso millet (volunteer, wild)	Panicum iliaceum	(8.5) c	c e
Barnyardgrass	Echinochloa crus-galli		ο του του του του του του του του του το
Blackgrass	Alopecurus myosuroides	ر ر	
Hood canarygrass	Phalaris paradoxa	0.875 cc, c	ι C C C C C '
Littleseed canarygrass	Phalaris minor	(14)	ິ See Ta⊍le 4
Windgrass	Apera interrupta		ίιταια
Wild oat	Avena fatua		ι. 

Field sandbur	Cenchrus incertus	
Woolly cupgrass	Erichloa villosa	

#### **INFORMATION ON HERBICIDE TOLERANT WEEDS**

Repeated use of the same herbicide or related herbicides may result in rare, naturally tolerant weeds multiplying to economic infestations. In areas with consistent use of the same herbicide or herbicide mode-of-action, crop rotation and application of alternative mode of action herbicides are encouraged to prevent and/or reduce weed tolerance. For further information, contact a Bayer CropScience representative or your local or state extension service.

#### TANK MIX COMBINATIONS

When tank mixing, read and follow the precautionary statements, directions for use, weeds controlled, geographic, and other restrictions on the labeling of each tank mix partner used. Use in accordance with the most restrictive label limitations and precautions. Tank mix partners not recommended on this label may cause reduced annual grass control (antagonism) or crop injury. It is recommended not to apply any pesticide, not listed on this label, 5 days before or after an application of PUMA Ultra Herbicide. Bayer CropScience recommends that PUMA Ultra Herbicide should not be tank mixed with liquid fertilizers unless specifically recommended on this label.

#### **Compatibility Testing with Tank Mix Partners**

If PUMA Ultra Herbicide is to be tank mixed with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5-15 minutes after mixing. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, geographic and other restrictions.

#### Insecticides

PUMA Ultra Herbicide may be tank mixed with either Furadan<sup>®</sup> 4F, Mustang Max, Sevin<sup>®</sup> XLR PLUS, or Warrior<sup>®</sup> insecticides if timing for insect and weed control are proper. Do not tank mix with malathion as wild oat control will be reduced.

#### Fungicides

Fungicides such as mancozeb (Dithane F-45®; Manzate® 75DF; Penncozeb® 75DF), Headline, Tilt<sup>®</sup> and Stratego®, or Topsin® M can be tank mixed with PUMA Ultra Herbicide when timing for application of each tank mix partner is the same for the use site.

It is not recommended to use additives when PUMA is tankmixed with fungicides or when PUMA is tankmixed with broadleaf herbicides plus fungicides as crop injury may result.

#### **Broadleaf Herbicides**

Broadleaf weed control options are listed in Tables 2, 3, or 4, when timing of application for each tank mix partner is the same for the use site. Always check the tank mix partner label to determine if the addition of a surfactant is required.

#### Tank Mixes for Green Foxtail, Foxtail Millets and Volunteer Corn Control

The tank mix partners listed in Table 2 may be used for the control of green foxtail, foxtail millets, and volunteer corn with PUMA Ultra Herbicide at a rate of 7 oz (0.44 pt) /A. If wild oat or yellow foxtail is the primary weed, see sections addressing tank mixes for these weeds.

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Herbicides for Broadleaf Weed Control	Rate	<u>Range of Dosages:</u> *** 0.50 - 0.75 pt/A of MCP Ester (4 lb/gal – formulation) may be added as an option
Ally® 60DF	0.10 oz/A	r Yes
Amber® 75DF	0.28 oz/A	Yes
Banvel® (for use on wheat only) (4 lb/gal)	2.0 fl oz/A	Yes
Banvel® SGF (for use on wheat only) (2 lb/gal)	4.0 fl oz/A	Yes
Bronate Advanced™ Herbicide */**	0.80 pt/A	No
Bronate Advanced™ Herbicide + Harmony GT	0.60 - 0.80 pt/A + 0.1 oz/A	No
Bronate Advanced™ Herbicide + Widematch	0.6 - 0.80 pt/A + 0.5 pt/A	: No
Bronate Advanced™ + Starane™	0.60 – 0.80 pt/A + 0.25 – 0.33 pt/A	No
Buctril® Herbicide */**	1.0 pt/A	Yes
Clarity® (for use on wheat only)	2.0 fl oz/A	Yes
Curtail™ M	1.75 pt/A	No
Curtail™ M + Clarity® (for use on wheat only)	1.75 pt/A + 2.00 oz/A	No
Curtail™ M + Starane™	1.75 pt/A + up to 0.66 pt/A	No
Express® 75DF	1/6 oz/A	Yes
Finesse	0.28 oz/A	Yes
Harmony® Extra 75DF	0.30 – 0.40 oz/A	Yes
Harmony® Extra + Starane™	0.30 oz/A + up to 0.66 pt/A	No
Harmony® GT	0.30 – 0.50 oz/A	Yes
Harmony® GT + Starane™	0.30 oz/A + up to 0.66 pt/A	· No
Huskie™	11 oz/A up to 15 oz/A	Yes
MCP Ester (4 lb/gal) ***	0.75 pt/A	No
Peak®	0.50 oz/A	Yes
Rave®	4.00 oz/A	No
Starane™	Up to 0.66 pt/A	Yes
Stinger™	0.25 – 0.33 pt/A	Yes
WideMatch™	1.00 pt/A	Yes

Table 2Green Foxtail, Foxtail Millets, Volunteer Corn

\* Private label Bronate Advanced or equivalent bromoxynil products may be substituted in a tank mix for these products. \*\* Do not tankmix PUMA® 1EC with either Buctril Herbicide or Bronate Advanced™ Herbicide on two row malting barley.

\*\*\* 4 Ib/gal formulation of MCP Ester. Other formulations of MCP Ester may be used providing 0.25 - .375 Ib, ai/, A of MCP Ester is used.

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# Tank Mixes for Yellow and Green Foxtail, Wild and Volunteer Proso Millets Control

The tank mix partners listed in Table 3 below are approved for the control of yellow and green foxtail and/or wild and volunteer proso millets using PUMA Ultra Herbicide at a rate of 8.5 oz (0.53 pt) /A. If wild oat is the primary weed, see the section addressing tank mixes for wild oat control.

Herbicides for Broadleaf Weed Control	Rate	Range of Dosages: *** 0.50 - 0.75 pt/A of MCP Ester (4 lb/gal formulation) may be added as an option
Banvel® (for use on wheat only) (4 lb/gal)	2.0 fl oz/A	Yes
Banvel® SGF (for use on wheat only) (2 lb/gal)	4.0 fl oz/A	Yes
Clarity® (for use on wheat only)	2.0 fl oz/A	Yes
Curtail™ M	1.75 pt/A	No
Curtail™ M + Clarity® (for use on wheat only)	1.75 pt/A + 2.0 oz/A	No
Curtail™ M + Starane™	1.75 pt/A + up to 0.66 pt/A	No
Huskie™	11 oz/A up to 13.5 oz/A	Yes
MCP Ester (4 lb/gal)	0:75 pt/A	No
Peak®	0.50 oz/A	Yes
Starane™	Up to 0.66 pt/A	Yes
Stinger™	0.25 – 0.33 pt/A	Yes
WideMatch™	1.0 pt/A	Yes

# Table 3Yellow and Green Foxtail, Wild & Volunteer Proso Millets

\*\*\* 4 lb/gal formulation of MCP Ester. Other formulations of MCP Ester may be used providing 0.25 - 0.375 lb a.i./ A of MCP Ester is used.

#### Tank Mixes for Wild Oat, Green and Yellow Foxtail, Blackgrass and Barnyardgrass Control

The tank mix partners listed in Table 4, below are approved for the control of wild oat, green and yellow foxtail, blackgrass, and barnyardgrass using PUMA Ultra Herbicide at a rate of 14 oz (0.87) pt/A.

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Herbicides for Broadleaf Weed Control	Rate	Range of Dosages: *** 0.50 - 0.75 pt/A of MCP Ester (4 lb/gal – formulation) may be added as an option
Bronate Advanced™ Herbicide */**	0.80 pt/A	No
Bronate Advanced™ + Harmony GT	0.60 – 0.80 pt/A + 0.10 oz/A	No
Bronate Advanced™ + Starane™	<sup>.</sup> 0.60 – 0.80 pt/A + 0.25 – 0.33 pt/A	No
Buctril Herbicide */**	1.00 pt/A	Yes
Buctril Herbicide + Starane™	1.00 pt/A + 0.25 - 0.33 pt/A	No
Bronate Advanced™ Herbicide + Harmony GT	0.60 - 0.80 pt/A + 0.1 oz/A	No
Bronate Advanced™ Herbicide + WideMatch	0.6 - 0.80 pt/A + 0.5 pt/A	Νο
Curtail™ M	1.75 pt/A	No
Curtail™ M + Starane™	1.75 pt/A + up to 0.66 pt/A	No
Harmony® Extra 75DF	0.30 – 0.40 oz/A	No
Harmony® Extra 75DF + Starane™	0.30 oz/A + up to 0.66 pt/A	No
Harmony® GT	0.30 – 0.50 oz/A	Yes
Harmony® GT + Starane™	0.30 oz/A + up to 0.66 pt/A	No
Huskie™	11 oz/A up to 15 oz/A	Yes
MCP Ester (4 lb/gal) ***	0.75 pt/A	No
Peak®	0.50 oz/A	Yes
Peak® + Starane™	0.50 oz/A + up to 0.66 pt/A	, <b>No</b>
Starane™	Up to 0.66 pt/A	Yes
Stinger™	0.25 – 0.33 pt/A	Yes
WideMatch™	1.00 pt/A	Yes

# Table 4

# Wild Oat, Green and Yellow Foxtail, Blackgrass and Barnyardgrass

\* Private label Bronate Advanced or equivalent bromoxynil products may be substituted in a tank mix for these products.

\*\* Do not tank mix PUMA Ultra Herbicide with either Buctril Herbicide or Bronate Advanced™ Herbicide on two row malting barley.

\*\*\* 4 lb/gal formulation of MCP Ester. Other formulations of MCP Ester may be used providing 0.25 - 0.375 lb a.i./ A of MCP Ester is used.

**NOTE:** When tank mixing PUMA Ultra Herbicide with the recommended herbicides above, do not exceed the labeled use rate shown for each tank mix partner, as reduced annual grass control may occur.

# For the Control of Wild Oat and Blackgrass in Winter Wheat in the States of Washington, Oregon and Northern Idaho

In winter wheat only, liquid nitrogen fertilizer may be tank mixed with PUMA Ultra Herbicide alone or with PUMA Ultra Herbicide and recommended broadleaf tank mixes. Only 28 – 32% liquid nitrogen fertilizer may be added. Do not exceed 5 gallons/acre of liquid nitrogen for ground applications or 50% of the total spray volume by air.

In winter wheat only, the following broadleaf herbicides may be tank mixed with PUMA Ultra Herbicide at  $tbe_{14}^{c}$   $be_{2}^{c}$  (0.87 pt) /  $bce_{14}^{c}$  rate when the target grass weeds are wild oat and/or blackgrass.

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Table 5

# Wild Oat and Blackgrass in Winter Wheat in the states of Montana, Oregon, Northern Idaho and Washington

Herbicides for Broadleaf Weed Control	, Deta
Ally	Rate up to 0.10 oz /A
Bronate Advanced™ *	up to 1.20 pt/A
Bronate Advanced™ + Harmony® Extra 75 DF *	up to 0.80 pt/A + up to 0.33 oz/A
Bronate Advanced™ + Harmony® GT *	up to 0.80 pt/A + up to 0.50 oz/A
Bronate Advanced ™ + Peak® *	up to 0.80 pt/A + up to 0.50 oz/A
Bronate Advanced™ + Starane™ *	up to 0.80 pt/A + up to 0.50 pt/A
Buctril Herbicide *	up to 1.50 pt/A
Buctril Herbicide + Ally *	up to 1.00 pt/A + up to 0.10 oz/A
Buctril Herbicide + Ally Extra®*	up to 1.00 pt/A + up to 0.20 oz/A
Buctril Herbicide + Express® *	up to 1.00 pt/A + up to 1/6 oz/A
Buctril Herbicide + Harmony® Extra 75 DF *	up to 1.00 pt/A + up to 0.40 oz/A
Buctril Herbicide + Harmony® GT *	up to 1.00 pt/A + up to 0.50 oz/A
Buctril Herbicide + Peak® *	up to 1.00 pt/A + up to 0.50 oz/A
Buctril Herbicide + Starane™ *	up to 1.00 pt/A + up to 0.50 pt/A
Curtail™ M + Harmony® GT	up to 1.75 pt/A + up to 0.50 oz/A
Express® 75DF	up to 1/6 oz/A
Harmony® Extra + Starane™	up to 0.40 oz/A + up to 0.66 pt/A
Harmony® GT + Starane™	up to 0.50 oz/A + up to 0.66 pt/A
Huskie™	11 oz/A up to 15 oz/A
MCP Ester + Ally **	up to 0.75 pt/A + up to 0.10 oz/A
MCP Ester + Ally Extra® **	up to 0.75 pt/A + up to 0.20 oz/A
MCP Ester + Express® **	up to 0.75 pt/A + up to 1/6 oz/A
MCP Ester + Harmony® Extra 75 DF **	up to 0.75 pt/A + up to 0.40 oz/A
MCP Ester + Harmony® GT **	up to 0.75 pt/A + up to 0.50 oz/A
MCP Ester + Harmony® GT + Starane™ **	up to 0.75 pt/A + up to 0.50 oz/A + up to 0.50 pt/A
MCP Ester + Peak® **	up to 0.75 pt/A + up to 0.50 oz/A
MCP Ester + Peak® + Starane™ **	up to 0.75 pt/A + up to 0.50 oz/A + up to 0.50 pt/A

\* Private label Bronate Advanced or equivalent bromoxynil products may be substituted in a tank mix for these products.

\*\* 4 lb/gal formulation of MCP Ester. Other formulations of MCP Ester may be used providing up to 0.375 lb ai/ A of MCP Ester is used. **NOTE:** When tank mixing PUMA Ultra Herbicide with the recommended herbicides above, do not exceed the labeled use rate shown for each tank mix partner, as reduced annual grass control may occur.

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# Directions for the Control of Wild Oat, Littleseed Canarygrass, and Hood Canarygrass in Wheat and Barley in California Only

## PUMA Ultra Herbicide Application Rates

Grasses (2-leaf to 2-tiller stage)	Broadcast Rate in Pints/Acre (Fluid Ounces/Acre)	•	
Wild oat			
Hood canarygrass	0.87 (14)		
Littleseed canarygrass			

**Notes:** In California, PUMA Ultra Herbicide may be tank mixed with Buctril Herbicide. Follow the label directions; use restrictions and precautions for use of Buctril Herbicide, when tank mixing it with PUMA Ultra Herbicide.

See "Special Notes" section for additional precautions.

# Directions for the Control of Wild Oat in Winter Wheat in Texas and Oklahoma Only

# PUMA Ultra Herbicide Application Rates

Grasses (2-leaf to 2-tiller stage)	Broadcast Rate in Pints/Acre (Fluid Ounces/Acre)	
Wild oat	0.87 (14)	

**Note:** In Texas and Oklahoma, PUMA Ultra Herbicide may be tank mixed with Ally, Harmony® Extra, Huskie<sup>™</sup>, MCP Ester and Peak®. Follow label directions, use restrictions and precautions for use of these tank mix partners when tank mixing with PUMA Ultra Herbicide.

#### SPECIAL NOTES

- 1. Rainfall within 1 hour of an application may cause a reduction in weed control.
- 2. DO NOT make more than 1 application in a growing season; DO NOT apply more than 0.874 pints per acre per growing season.
- 3. DO NOT harvest winter wheat until 70 days after application.
- 4. DO NOT apply this product through any irrigation system.
- 5. Pesticide or liquid fertilizer tankmixes not recommended on this label may cause reduced annual grass control or crop injury. It is recommended not to apply any pesticides other than those listed on this label within 5 days of a PUMA Ultra Herbicide application (split application).
- DO NOT use when there is hazard from drifting mists. Coarse sprays are less likely to drift.

# STORAGE AND DISPOSAL

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

#### Pesticide storage

Store in original container away from feed and food. Store in cool, dry area. Do not store in direct su	inlight. Do not	t allev: prolonged
storage in temperatures that exceed 105°F (40°C) or in temperatures that fall below 14°F (-10°C).	creece	ις σ΄ ις τε

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#### Pesticide disposal

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

#### Container handling

Rigid, Non-refillable containers (equal to or less than 5 gallons)

Pressure rinse as follows: Empty the remaining contents into application equipment or a 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.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

#### Rigid containers (greater than 5 gallons or 50 lb)

#### Non-refillable Containers

Non-refillable containers - Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

#### Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior port ions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

#### Top Discharge IBC, Drums, Kegs (e.g. - Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

#### **Refillable Containers**

Refillable container – Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

#### Bottom Discharge IBC (e.g. - Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

#### Top Discharge IBC, Drums, Kegs (e.g. - Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary field of the container is rinsed.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

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# IMPORTANT: READ BEFORE USE

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

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks 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 the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

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Warning: This product contains a chemical known to the State of California to cause developmental harm.

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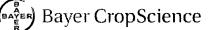
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**Net Contents:** 

**Produced for** 



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