

359-716 PM 25 10/15

PRODUCT NUMBER  
2073

# SPECIMEN LABEL

# BUCTRIL<sup>®</sup> A EC

HERBICIDE



Add annual canarygrass,  
mint, onions  
1974 7-9-75

For the control of certain broadleaf weeds in small grains, corn, sorghum,  
flax, garlic, turf and other noncrop areas.

**ACTIVE INGREDIENT:**

Heptanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile)	33.5%
Butyric acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile)	20.0%
<b>INERT INGREDIENTS</b>	46.5%

Equivalent to 4 pounds of bromoxynil per gallon.

Keep Out of Reach of Children

PELIGRO

DANGER

PRECAUTION AL USUARIO:  
Si usted no lee ingles, no use  
este producto hasta que le  
etiqueta haya sido explicado  
ampliamente.

**STATEMENT OF  
PRACTICAL TREATMENT**

- IF IN EYES:** Flush with water for 15 minutes. Get medical attention.
- IF SWALLOWED:** Get medical attention. Do not induce vomiting. Do not give anything by mouth to an unconscious person.
- IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if irritation persists.
- IF INHALED:** Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. Get medical attention.

See Side Panel for Additional Precautionary Statements

This pesticide is toxic to wildlife and fish. Use with care when applying to areas frequented by wildlife or adjacent to any body of water. Do not apply directly to water. Do not apply when weather conditions favor drift from target areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

#### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame

#### DIRECTIONS FOR USE

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

#### REENTRY STATEMENT

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or Oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers and given in a language customarily understood by the workers.

Oral and Written warnings must include the Statement of Practical Treatment and Reentry Statements as they appear on the label.

ACCEPTED

OCT - 7 1985

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 359-716

#### STORAGE AND DISPOSAL

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

##### STORAGE

Do not store near fertilizers or seeds. Store at temperatures above 32°F. If allowed to freeze, remix before using.

##### 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:

Metal: Triple rinse (or equivalent). Then ~~allow to dry completely~~ puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Plastic: Triple rinse (or equivalent). Then ~~allow to dry completely~~ puncture and dispose of in a sanitary landfill, or in incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Underlined Buctril is changed to Buctril 4 EC:

#### GENERAL INFORMATION

Add annual canarygrass, mint, onions

Buctril is a selective postemergence herbicide for control of important broadleaf weeds infesting small grains (wheat, barley, oats and rye), field corn, popcorn, grain sorghum, flax, garlic, turf and noncrop areas. Optimum weed control is obtained when Buctril is applied to actively growing weed seedlings. Buctril is primarily a contact herbicide, therefore thorough coverage of the weed seedlings is essential for optimum control.

AW: heptanoic and butyric acid esters

Buctril is formulated as an emulsifiable concentrate of ~~0.5% to 1.0%~~ of bromoxynil containing the equivalent of <sup>4</sup> pounds of bromoxynil per gallon. To broaden the spectrum of control in wheat and barley, Buctril may be tankmixed with Glean, Avenge, MCPA, 2,4-D or Hoelon. In oats and rye, Buctril may be tankmixed with MCPA or 2,4-D. In field corn and popcorn, Buctril can be tankmixed with atrazine or 2,4-D. Buctril may also be tankmixed with atrazine in grain sorghum. On turf, Buctril can be tankmixed with MCPP, Banvel, MCPP + Banvel or 2,4-D + MCPP. See individual crop recommendations for proper chemical rates to be used. To ensure maximum crop safety, and weed control, follow all cautions and limitations on this label and the labels of products used in the tank mixture with Buctril.

#### MIXING INSTRUCTIONS

Buctril Alone: Fill the spray tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full with clean water. Begin agitation and add the recommended amount of Buctril. Add water to the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application.

Tank Mixtures: Fill the spray tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full with clean water and begin agitation. If tankmixing with either Glean or atrazine, add the recommended amount of Glean or atrazine first. After the herbicide is thoroughly mixed with water, add the recommended amount of Buctril and add water to the spray tank to the desired level.

If tankmixing with Avenge, MCPA, 2,4-D, Hoelon, MCPP, or Banvel, add the recommended amount of Buctril first. After Buctril is thoroughly mixed with water, add the recommended amount of the other herbicide(s) to the spray tank and add water to the spray tank to the desired level.

Maintain sufficient agitation while mixing and during application to ensure a uniform spray mixture. If spray mixture is allowed to remain without agitation for short periods of time, be sure to agitate until uniformly mixed before application.

**APPLICATION PROCEDURES**

Buctril alone and in a tank mixture with Glean, Avenge, MCPA, 2,4-D, Hoelon and atrazine can be applied by both ground and aerial equipment. In addition, Buctril alone can be applied by automated sprinkler irrigation systems. The following provides recommended methods of application for each crop.

Note: underlined Buctril is changed to Buctril 4 EC:

Annual  
canarygrass  
int  
ions

Ground  
X  
X  
X

CROP	TYPE OF APPLICATION EQUIPMENT		
	GROUND	AERIAL	AUTOMATED SPRINKLER IRRIGATION
SMALL GRAINS	X	X	X
FIELD AND POPCORN		X	X
GRAIN SORGHUM	X		X
FLAX	X	X	
GARLIC	X	X	
TURF	X		
NONCROP AREAS	X		

X indicates recommended application use

**GROUND APPLICATION**

Use a standard herbicide boom sprayer that provides uniform and accurate application. Sprayer should be equipped with screens no finer than 50 mesh in the nozzle tips and in-line strainers. Specific application instructions are described under each crop heading.

**AERIAL APPLICATION**

Use a minimum of 5 gallons of spray volume per acre using diaphragm-type nozzles that produce cone or fan spray patterns with a maximum spray pressure of 40 psi at the nozzle tips. Nozzles should be located no farther than 1/4 the distance from the center of the aircraft to the end of the wing or rotor. Nozzles should be oriented at an angle between straight down and straight back.

The aircraft should discharge the spray a maximum of 10 feet above the crop. To minimize drift, do not apply during periods of gusty winds or when wind exceeds 5 mph.

**AUTOMATED SPRINKLER IRRIGATION SYSTEMS**

Buctril may be applied through automated sprinkler irrigation systems to small grains, field and popcorn and grain sorghum. Use a properly engineered chemical injection system which includes antisiphon and check valves to prevent water source contamination and overflow of the mix tank. The system should also include interlocking controls between the metering device and the water pump to ensure simultaneous shutoff. The sprinkler system should provide uniform coverage and should have no leaks. The chemical injection tank should be cleaned before application to remove all fertilizer, pesticide and other foreign matter. Add Buctril or a Buctril-water mixture to the injector tank. A solution of Buctril diluted with water can be used only where agitation is present in the mix tank to achieve higher volumes needed in some irrigation systems. Carefully calibrate the system before and during application. Allow sufficient time for Buctril to be flushed through the system before turning off the irrigation water.

**GENERAL WEED LIST**

Postemergence application of Buctril will control the following weeds when sprayed in the seedling stage. Maximum weed stage of growth is listed under RECOMMENDED USES for each crop.

**MOST SUSCEPTIBLE BROADLEAF WEED SPECIES:**

- Annual Sowthistle (*Sonchus oleraceus*)
- Black Nightshade (*Solanum nigrum*)
- Blue Mustard (*Chorispora tenella*)
- Coast Fiddleneck (*Amsinckia intermedia*)
- Common Cocklebur (*Xanthium pensylvanicum*)
- Common Lambsquarters (*Chenopodium album*)
- Common Tarweed (*Hemizonia congesta*)
- Eastern Black Nightshade (*Solanum ptycanthum*)
- Field Pennycress (*Thlaspi arvense*)
- Green Smartweed (*Polygonum scabrum*)
- Hairy Nightshade (*Solanum sarachoides*)
- Jimsonweed (*Datura stramonium*)
- Ladythumb (*Polygonum persicaria*)
- Pennsylvania Smartweed (*Polygonum pensylvanicum*)
- Pepperweed spp. (annual) (*Lepidium* spp.)
- Shepherdspurse (*Capsella bursa-pastoris*)
- Silverleaf Nightshade (*Solanum elaeagnifolium*)
- Starry Buckwheat (*Fagopyrum tataricum*)
- Sunflower (*Helianthus annuus*)
- Wild Buckwheat (*Polygonum convolvulus*)

**SUSCEPTIBLE BROADLEAF WEED SPECIES:**

- Buffalobur (*Solanum rostratum*)
- Common Groundsel (*Senecio vulgaris*)
- Common ragweed (*Ambrosia artemisiifolia*)
- Corn Chamomile (*Anthemis arvensis*)
- Corn Gromwell (*Lithospermum arvense*)
- Cow Cockle (*Saponaria vaccaria*)
- Giant Ragweed (*Ambrosia trifida*)
- Hemp Sesbania (*Sesbania exaltata*)
- Ivyleaf morningglory (*Ipomoea hederacea*)
- Knawel (*Scleranthus annuus*)
- (2)-Kochia (*Kochia scoparia*)
- London Rocket (*Sisymbrium irio*)
- Mayweed (*Anthemis cotula*)
- Prostrate Knotweed (*Polygonum aviculare*)
- (2)-Redroot Pigweed (*Amaranthus retroflexus*)
- Russian Thistle (*Salsola kali*)
- (2)-Spiny Pigweed (*Amaranthus spinosus*)
- Tall Morningglory (*Ipomoea purpurea*)
- (2)-Tall Waterhemp (*Amaranthus tuberculatus*)
- Tumble mustard (*Sisymbrium altissimum*)
- Velvetleaf (*Abutilon theophrasti*)
- Wild Mustard (*Brassica kaber*)
- Wild Radish (*Raphanus raphanistrum*)

(1) For control of sunflower, delay application until first emerging sunflower seedlings are 4 inches in height.

(2) For effective control, these weeds should not exceed the 4 leaf stage or 2 inches in height, whichever comes first.

**WEED SUPPRESSION**

Buctril suppresses the growth of Canada Thistle (*Cirsium arvense*) by burning down of top growth. Regrowth may occur.

**AUTOMATED SPRINKLER IRRIGATION SYSTEMS**

Apply Buctril by automated sprinkler irrigation systems using 1/2 to 1 1/2 acre-inch of water per acre. Refer to GENERAL INFORMATION section for complete use directions and precautions.

**SPRAYABLE LIQUID FERTILIZERS**

Buctril can be applied to small grains using sprayable liquid fertilizer as the carrier. Predetermine the compatibility with the liquid fertilizer by mixing small proportional quantities in advance. Agitation must be maintained during filling and application operations to ensure that Buctril is evenly mixed with the fertilizer. Leaf burn may occur when Buctril is applied with liquid fertilizer, but new leaves are not adversely affected.

**RECOMMENDED USES**

The recommended rate of Buctril used alone or in a tank mixture with another herbicide is determined by the crop (winter or spring seeded), geographic area, application equipment (ground, aerial, or automated sprinkler irrigation systems), weed species and stage of growth of weeds at time of application.

Recommendations are as follows:

**WHEAT, BARLEY, OATS, and RYE**

Buctril can be applied to small grains from emergence up to the boot stage. Applications should be made to weeds soon after emergence for best weed control and to prevent competition to the crop. Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures. Avoid spray drift to nontarget areas. Do not graze treated fields for 30 days following application.

Buctril can be applied to wheat and barley alone or in a tank mixture with Glean, Avenge, MCPA, 2,4-D, or Hoelon to broaden the spectrum of weed control. Buctril can also be applied to oats and rye alone or in a tank mixture with MCPA or 2,4-D. To ensure maximum crop safety and weed control, follow all cautions and limitations on this label and the labels of products used in tank mixtures with Buctril.

**APPLICATION PROCEDURES**

**GROUND APPLICATION**

Buctril used alone and in tank mixtures can be applied by ground equipment using a minimum spray volume of 10 gallons per acre. Use flat fan nozzles spaced a maximum of 20 inches apart with a minimum spray pressure of 30 psi at the nozzle tips. Other nozzle types may not provide adequate coverage of the weeds to ensure optimum weed control.

**AERIAL APPLICATION**

Buctril and tank mixtures with Buctril can be applied by aerial equipment using a minimum spray volume of 5 gallons per acre with a maximum spray pressure of 40 psi at the nozzle tips. Refer to AERIAL APPLICATION under the GENERAL INFORMATION section for complete use directions.

**WHEAT and BARLEY  
(Ground and Aerial Applications)  
BUCTRIL RECOMMENDATIONS**

				TIMING OF APPLICATION
PRODUCT	CROP/GEOGRAPHICAL AREA	RATE	CROP	WEED
<u>Buctril</u>	Fall seeded wheat and barley throughout the United States and spring seeded wheat and barley in Idaho, Oregon and Washington.	3/4 Pint/A	Apply to wheat and barley from emergence to the boot stage.	Most Susceptible Broadleaf Weeds Apply to weeds up to the 8 leaf stage or 4 inches in height whichever comes first. If weed forms rosette, apply before weeds exceed 2 inches in diameter.
		1 Pint/A		Susceptible Broadleaf Weeds Apply to weeds up to the 4 leaf stage or 2 inches in height whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter.
	Spring seeded wheat and barley except Idaho, Oregon and Washington.	1/2 Pint/A	Apply to wheat and barley from emergence to the boot stage.	Most Susceptible and Susceptible Broadleaf Weeds Apply <u>Buctril</u> at 1/2 pint/A to weeds that do not exceed the 4 leaf stage or 2 inches in height whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter. <span style="float: right;">1/2</span>
		3/4 Pint/A		Use <u>Buctril</u> at 3/4 pint/A for control of kochia that is 2-4 inches in height and pigweed ( <i>Amaranthus</i> spp.) that does not exceed the 4 leaf stage or 2 inches in height, whichever comes first. <span style="float: right;">3/4</span>

**BUCTRIL TANK MIXTURE RECOMMENDATIONS**

TIMING OF APPLICATION				
PRODUCT	CROPIGEOGRAPHICAL AREA	RATE	CROP	WEED
<b>Buctril</b> + <b>GLEAN</b> (Tankmix)	Fall seeded wheat and barley throughout the United States and spring seeded wheat and barley in Idaho, Oregon and Washington	3/8 Pint/A + 1/4 - 1/2 ounce/A	Apply to wheat and barley in the fall or spring at any time after the crop is in the 2 to 3 leaf stage but before the boot stage	Most Susceptible Broadleaf Weeds Apply to weeds up to the 8 leaf stage or 4 inches in height whichever comes first. If weed forms rosette, apply before weeds exceed 2 inches in diameter
		1/2 Pint/A + 1/4 - 1/2 ounce/A		Susceptible Broadleaf Weeds Apply to weeds up to the 4 leaf stage or 2 inches in height whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter
	3/8 Pint/A + 1/4 - 1/2 ounce/A	Most Susceptible and Susceptible Broadleaf Weeds Apply <b>Buctril</b> - Glean at 3/8 pint A + 1/4 - 1/2 ounces/A to weeds that do not exceed the 4 leaf stage or 2 inches in height whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter.		
	3/4 Pint/A + 1/4 - 1/2 ounce/A	Use <b>Buctril</b> + Glean at 3/4 pints/A + 1/4 - 1/2 ounces/A for control of Kochia that is 2-4 inches in height and pigweed ( <i>Amaranthus</i> spp.) that does not exceed the 4 leaf stage or 2 inches in height, whichever comes first.		

A tankmix application of **Buctril** and Glean broadens the spectrum of weed control. See Glean label for listing of additional susceptible weed species and crop rotation instructions.  
Glean is a registered trademark of E.I. DuPont de Nemours & Co., Inc.

**BUCTRIL and AVENGE**

A tank mixture of **Buctril** + Avenge can be used to control wild oats in addition to the broadleaf weeds controlled by **Buctril**. The rate and application timing for broadleaf weed control with **Buctril** in the tank mixture is the same as when **Buctril** is used alone. See **BUCTRIL** RECOMMENDATIONS.

Apply **Buctril** + Avenge tank mixtures when the majority of the wild oats are in the 3 to 5 leaf stage of growth. This frequently coincides with barley in the 2 to 7 leaf stage, spring seeded wheat in the 5 to 6 leaf stage, and fall seeded wheat in the 4 leaf to tillered stage of growth.

See Avenge label for varietal restrictions and recommended Avenge rates as related to wild oat density.  
Avenge is a trademark of American Cyanamid Company.

**BUCTRIL and MCPA or 2,4-D**

A tank mixture of **Buctril** at the recommended rate and MCPA or 2,4-D at 1/4 to 1/2 pound of active ingredient per acre is used to broaden the spectrum of broadleaf weed control. The tank mixture will control the weeds listed on the MCPA or 2,4-D labels in addition to the weeds listed on the **Buctril** label. The rate of **Buctril** in the tank mixture is the same as when **Buctril** is used alone. See **BUCTRIL** RECOMMENDATIONS.

**Buctril** + MCPA tank mixtures can be applied after the 3 leaf stage but before the crop reaches the boot stage. **Buctril** + 2,4-D tank mixtures can be applied after the crop has tillered but before the forming of joints in the stem.

**BUCTRIL and HOELON**

A tank mixture of **Buctril** + Hoelon can be used to control annual grasses in addition to the broadleaf weeds controlled by **Buctril**. The rate and application timing for broadleaf weed control with **Buctril** in the tank mixture is the same as when **Buctril** is used alone. See **BUCTRIL** RECOMMENDATIONS.

**Buctril** + Hoelon tank mixtures can be applied to fall seeded wheat and spring seeded wheat and barley up to the jointing stage of growth. Annual grasses should be in the 1 to 3 leaf stage of growth; up to the 4 leaf stage in wheat. See Hoelon label to determine recommended Hoelon rate in relation to the annual grassy weed stage of growth.  
Hoelon is a trademark of Hoechst AG.

**OATS and RYE**

**Buctril** used alone or in a tank mixture with MCPA or 2,4-D can be applied to oats and rye. Use the same rates and application timing as recommended for wheat and barley. Refer to previous section for WHEAT AND BARLEY.

6915

# WHEAT, BARLEY, OATS, and RYE (Automated Sprinkler Irrigation Application)

Buctril can be applied through automated sprinkler irrigation systems to fall and spring seeded wheat, barley, oats and rye from emergence to the boot stage. Apply Buctril at  $\frac{1}{2}$  pint/A in  $\frac{1}{4}$  to  $\frac{1}{2}$  acre-inch of water. See GENERAL INFORMATION section for complete use directions and precautions. Refer to GENERAL WEED LIST in GENERAL INFORMATION section for list of MOST SUSCEPTIBLE BROADLEAF WEEDS and SUSCEPTIBLE BROADLEAF WEEDS to postemergence applications of Buctril.

### MOST SUSCEPTIBLE BROADLEAF WEEDS

Apply to weeds up to the 8 leaf stage or 4 inches in height whichever comes first. If weed forms rosette apply before weeds exceed 2 inches in diameter.

### SUSCEPTIBLE BROADLEAF WEEDS

Apply to weeds up to the 4 leaf stage or 2 inches in height whichever comes first. If weed forms rosette apply before weeds exceed 1 inch in diameter.

WEED SIZE IS CRITICAL WHEN BUCTRIL IS APPLIED THROUGH AUTOMATED SPRINKLER IRRIGATION SYSTEMS. WEEDS SHOULD NOT EXCEED THE MAXIMUM INDICATED STAGE OF GROWTH.

Do not apply Buctril through automated sprinkler irrigation systems in California.

## FIELD CORN, POPCORN and GRAIN SORGHUM

Buctril is applied as a broadcast application in field corn, popcorn or grain sorghum grown for grains, seed or silage under conventional, minimum tillage, ridge tillage or no-till systems. For optimum control spray seedling weeds that are actively growing and not stressed from lack of moisture or low temperatures. Avoid spray drift to non-target areas.

A tank mixture of Buctril + atrazine may be used in field corn, popcorn or grain sorghum to broaden the spectrum of control and provide residual control of germinating seedlings. In field corn, Buctril may also be used in a tank mixture with 2,4-D.

When environmental conditions are quite cool and cloudy or hot and humid, some leaf burn may occur on the corn or grain sorghum foliage. The crop rapidly outgrows this condition and new growth is unaffected. To ensure maximum crop safety and weed control, follow all cautions and limitations on this label and the labels of products used in tank mixtures with Buctril.

### APPLICATION PROCEDURES

Buctril used alone and in tank mixtures can be applied by ground equipment using a minimum of 20 gallons of spray volume per acre. Use flat fan nozzles spaced a maximum of 20 inches apart with a minimum spray pressure of 30 psi at the nozzle tips. Other nozzle types may not provide adequate coverage of the weeds to ensure optimum control. When weed infestations are heavy, use of a higher spray volume and spray pressure will be helpful to ensure uniform weed coverage.

For aerial application to field corn and popcorn, use a minimum of 5 gallons of spray volume per acre with a maximum spray pressure of 40 psi at the nozzle tips. Refer to AERIAL APPLICATION under GENERAL INFORMATION section for complete use directions.

Buctril can also be applied to field corn, popcorn and grain sorghum through automated sprinkler irrigation systems. Refer to GENERAL INFORMATION section for complete use directions and precautions.

### RESTRICTIONS and LIMITATIONS

Buctril does not control grasses. Therefore, it is recommended that a suitable grass control program be used to provide any required grass control.

Do not add a spray additive, or mix with liquid fertilizers, because excessive crop injury may occur.

Do not apply Buctril if heavy rainfall is expected within 1 hour of application.

Seed corn producers should consult the respective seed corn company regarding tolerance of certain seed production inbred lines to Buctril.

Do not plant rotational crops until the following use season.

Do not cut for feed or graze within 30 days after application.

A second application of Buctril is recommended if a new flush of weeds occurs following the first application. The total cumulative rate should not exceed  $\frac{1}{2}$  pints/A per season. Application may be made to corn up to the 8-leaf stage regardless of height. Application may be made to grain sorghum up to the 10-leaf stage not to exceed 12 inches in height.

*NOTE: underlined Buctril is changed to Buctril 4 EC:*

**BUCTRIL RECOMMENDATIONS**

Postemergence applications of Buctril at  $\frac{1}{2}$  and  $\frac{3}{4}$  pint/A can be applied to field corn, popcorn and grain sorghum using the following use directions. Refer to APPLICATION RATE TABLE for weeds controlled.

**APPLICATION RATE TABLE FOR CORN AND GRAIN SORGHUM**

WEED SPECIES  When determining leaf stage, count all leaves except cotyledonary leaves		1/2 Pint/A		3/4 Pints/A	
		Maximum Leaf Stage	Maximum Weed Height (Inches)	Maximum Leaf Stage	Maximum Weed Height (inches)
Black Nightshade	<i>Solanum nigrum</i>	6	6	6	6
Buffalobur	<i>Solanum rostratum</i>	4	2	6	4
Common Cocklebur	<i>Xanthium pensylvanicum</i>	6	8	8	10
Common Lambsquarters	<i>Chenopodium album</i>	—	6	—	8
Common Ragweed	<i>Ambrosia artemisiifolia</i>	6	4	8	6
Eastern Black Nightshade	<i>Solanum ptycanthum</i>	6	6	6	6
Giant Ragweed	<i>Ambrosia trifida</i>	6	4	6	6
Hemp Sesbania	<i>Sesbania exaltata</i>	—	—	4	4
Ivyleaf Morningglory	<i>Ipomoea hederacea</i>	3	3	4	4
Jimsonweed	<i>Datura stramonium</i>	4	4	6	6
Ladysthumb	<i>Polygonum persicaria</i>	4	4	6	6
Pennsylvania Smartweed	<i>Polygonum pensylvanicum</i>	4	4	6	6
Redroot Pigweed	<i>Amaranthus retroflexus</i>	—	—	4	2
Spiny Pigweed	<i>Amaranthus spinosus</i>	—	—	4	2
Sunflower	<i>Helianthus annuus</i>	4	6	6	8
Tall Morningglory	<i>Ipomoea purpurea</i>	3	3	4	4
Tall Waterhemp	<i>Amaranthus tuberculatus</i>	—	—	4	2
Velvetleaf	<i>Abutilon theophrasti</i>	4	3	6	5
Wild Buckwheat	<i>Polygonum convolvulus</i>	4	6	6	8
Wild Mustard	<i>Brassica kaber</i>	—	—	4	4

  

WEEDS SUPPRESSED					
<b>Canada Thistle</b>	<i>Cirsium arvense</i>	not recommended		8 inch to bud stage	
<u>Buctril</u> suppresses the growth by burning down of top growth. Regrowth may occur.					

**FIELD CORN and POPCORN  
(Ground and Aerial Applications)  
BUCTRIL RECOMMENDATIONS**

TIMING OF APPLICATION			
PRODUCT	RATE	CROP	WEED 1/
<u>Buctril</u>	1/2 Pint/A	Apply to corn from the 3-leaf stage to the 8-leaf stage— maximum of two applications per season.	See APPLICATION RATE TABLE for list of weeds and corresponding maximum stage of growth that are controlled by <u>Buctril</u> at $\frac{1}{2}$ pint/A.
	3/4 Pint/A	Apply to corn from the 4-leaf stage to the 8-leaf stage— maximum of two applications per season.	See APPLICATION RATE TABLE for list of weeds and corresponding maximum stage of growth that are controlled by <u>Buctril</u> at $\frac{3}{4}$ pint/A.

1/ For control of additional weeds not listed in the APPLICATION RATE TABLE for field corn, popcorn and grain sorghum, see GENERAL WEED LIST: Use Buctril at  $\frac{1}{2}$  pint/A for control of MOST SUSCEPTIBLE WEEDS and  $\frac{3}{4}$  pint/A for control of SUSCEPTIBLE WEEDS. Apply Buctril to weeds that do not exceed the 4-leaf stage or 2 inches in height, whichever comes first. If weed forms rosette, apply before weed exceeds 1 inch in diameter.

*Note: underlined Buctril is changed to Buctril 4 EC:*

**FIELD CORN and POPCORN**  
(Ground and Aerial Applications)  
**BUCTRIL TANKMIX RECOMMENDATIONS**

**TIMING OF APPLICATION**

PRODUCT	RATE	CROP	WEED
Buctril + Atrazine 1 <sup>1/</sup> (Tankmix)	1/2 Pint/A + 1/2-1 1/2 lbai/A	Apply to corn from the 3-leaf stage to the 8-leaf stage	All weeds controlled by Buctril at 1/2 pint/A plus control of pigweeds ( <i>Amaranthus</i> Spp.) up to the 6-leaf stage or 4 inches in height, whichever comes first. This tank mixture also provided some residual control of germinating seedlings. <span style="float:right">1/2</span>
	3/4 Pint/A + 1/2-1 1/2 lbai/A	Apply to corn from the 4-leaf stage to the 8-leaf stage	All weeds controlled by Buctril at 3/4 pint/A plus control of pigweeds ( <i>Amaranthus</i> Spp.) up to the 6-leaf stage or 4 inches in height, whichever comes first. This tank mixture also provides some residual control of germinating seedlings. <span style="float:right">3/4</span>

1/

**ATRAZINE CONVERSION TABLE**

Atrazine Formulation	Atrazine Rate Pounds of active ingredient per acre	Atrazine Formulation Rate per acre
Atrazine 4L	1/2	1 Pint
Atrazine 80 WP	1 1/2	2 1/2 Pints
Aatrex <sup>2</sup> Nine-0	1/2	1/2 Pound
	1 1/2	1 1/2 Pounds
	1 1/2	1 1/2 Pounds

**FIELD CORN**  
(Ground and Aerial Applications)  
**BUCTRIL TANKMIX RECOMMENDATIONS**

**TIMING OF APPLICATION**

PRODUCT	RATE	CROP	WEED
Buctril + 2,4-D 2 <sup>1/</sup> (Tankmix)	1/2 Pint/A + 1/2 lbai/A	Apply to corn from the 3-leaf stage to the 8-leaf stage. When corn exceeds 8 inches in height, drop nozzles must be used to apply the Buctril + 2,4-D tank mixture as a directed spray.	All weeds controlled by Buctril at 1/2 pint/A plus control of wild mustard that is larger than the 4-leaf stage or 4 inches in height, whichever comes first. <span style="float:right">1/2</span>
	3/4 Pint/A + 1/2 lbai/A	Apply to corn from the 4-leaf stage to the 8-leaf stage. When corn exceeds 8 inches in height, drop nozzles must be used to apply the Buctril + 2,4-D tank mixture as a directed spray.	All weeds controlled by Buctril at 3/4 pint/A plus control of wild mustard that is larger than the 4-leaf stage or 4 inches in height, whichever comes first. <span style="float:right">3/4</span>

2/

**2,4-D CONVERSION TABLE**

2,4-D Formulation	2,4-D Rate Pounds of active ingredient per acre	2,4-D Formulation Rate per acre
2,4-D 4lb/gallon	1/4	1/2 Pint
2,4-D 6lb/gallon	1/2	2 1/2 Pints
	1/4	1/2 Pint

**SPECIAL PRECAUTIONS FOR BUCTRIL + 2,4-D TANK MIXTURE.** Postemergence applications of 2,4-D causes brittleness to corn. Winds or cultivations may cause breakage while corn is brittle. Refer to 2,4-D label for other use directions and cautions.



### FIELD CORN and POPCORN (Automated Sprinkler Irrigation Application)

Buctril can be applied through automated sprinkler irrigation systems to field and popcorn from the 3-leaf to the 8-leaf stage. Apply Buctril at 1/2 pint/A in 1/4 to 1/2 acre-inch of water. See GENERAL INFORMATION section for complete use directions and precautions. Refer to GENERAL WEED LIST in the GENERAL INFORMATION section for list of MOST SUSCEPTIBLE BROADLEAF WEEDS and SUSCEPTIBLE BROADLEAF WEEDS to postemergence applications of Buctril.

#### MOST SUSCEPTIBLE BROADLEAF WEEDS

Apply to weeds up to the 8 leaf stage or 4 inches in height whichever comes first. If weed forms rosette apply before weeds exceed 2 inches in diameter.

#### SUSCEPTIBLE BROADLEAF WEEDS

Apply to weeds up to the 4 leaf stage or 2 inches in height whichever comes first. If weed forms rosette apply before weeds exceed 1 inch in diameter.

WEED SIZE IS CRITICAL WHEN BUCTRIL IS APPLIED THROUGH AUTOMATED SPRINKLER IRRIGATION SYSTEMS. WEEDS SHOULD NOT EXCEED THE MAXIMUM INDICATED STAGE OF GROWTH.

Do not apply Buctril through automated sprinkler irrigation systems in California.

### GRAIN SORGHUM

(Ground Application)

#### BUCTRIL RECOMMENDATIONS

#### TIMING OF APPLICATION

PRODUCT	RATE	CROP	WEED <sup>11</sup>
<u>Buctril</u>	1/2 Pint/A	Apply to grain sorghum from the 3-leaf stage to the 10-leaf stage, not to exceed 12 inches in height.	See APPLICATION RATE TABLE for list of weeds and corresponding maximum stage of growth that are controlled by <u>Buctril</u> at 1/2 pint/A.
	3/4 Pint/A	Apply to grain sorghum from the 4-leaf stage to the 10-leaf stage, not to exceed 12 inches in height.	See APPLICATION RATE TABLE for list of weeds and corresponding maximum stage of growth that are controlled by <u>Buctril</u> at 3/4 pint/A.
<u>Buctril</u> + Atrazine (Tankmix)	1/2 Pint/A + 1/2-1 1/4 lbai/A	Apply to grain sorghum from the 3-leaf stage to the 10-leaf stage, not to exceed 12 inches in height.	All weeds controlled by <u>Buctril</u> at 1/2 pint/A plus control of pigweeds (Amaranthus Spp.) up to the 6-leaf stage or 4 inches in height, whichever comes first. This tank mixture also provides some residual control of germinating seedlings.
	3/4 Pint/A + 1/2-1 1/4 lbai/A	Apply to grain sorghum from the 4-leaf stage to the 10-leaf stage, not to exceed 12 inches in height.	All weeds controlled by <u>Buctril</u> at 3/4 pint/A plus control of pigweeds (Amaranthus Spp.) up to the 6-leaf stage or 4 inches in height, whichever comes first. This tank mixture also provides some residual control of germinating seedlings.

For control of additional weeds not listed in the APPLICATION RATE TABLE for field corn, popcorn and grain sorghum, see GENERAL WEED LIST. Use Buctril at 1/2 pint/A for control of MOST SUSCEPTIBLE WEEDS and 3/4 pint/A for control of SUSCEPTIBLE WEEDS. Apply Buctril to weeds that do not exceed the 4-leaf stage or 2 inches in height, whichever comes first. If weed forms rosette, apply before weed exceeds 1 inch in diameter.

### GRAIN SORGHUM

(Automated Sprinkler Irrigation Application)

Buctril can be applied through automated sprinkler irrigation systems to grain sorghum from the 3-leaf to the 10-leaf stage, not to exceed 12 inches in height. Apply Buctril at 1/2 pint/A in 1/4 to 1/2 acre-inch of water. See GENERAL INFORMATION section for complete use directions and precautions. Refer to GENERAL WEED LIST in the GENERAL INFORMATION section for list of MOST SUSCEPTIBLE BROADLEAF WEEDS and SUSCEPTIBLE BROADLEAF WEEDS to postemergence applications of Buctril.

#### MOST SUSCEPTIBLE BROADLEAF WEEDS

Apply to weeds up to the 8 leaf stage or 4 inches in height whichever comes first. If weed forms rosette apply before weeds exceed 2 inches in diameter.

#### SUSCEPTIBLE BROADLEAF WEEDS

Apply to weeds up to the 4 leaf stage or 2 inches in height whichever comes first. If weed forms rosette apply before weeds exceed 1 inch in diameter.

WEED SIZE IS CRITICAL WHEN BUCTRIL IS APPLIED THROUGH AUTOMATED SPRINKLER IRRIGATION SYSTEMS. WEEDS SHOULD NOT EXCEED THE MAXIMUM INDICATED STAGE OF GROWTH.

Do not apply Buctril through automated sprinkler irrigation systems in California.

NOTE: underlined Buctril is changed to Buctril 4 EC:

10 of 15

### FLAX

Apply Buctril when weed seedlings are actively growing. For optimum control apply Buctril in sufficient spray volume to ensure good coverage of the weeds. Do not apply to flax under humid conditions and when air temperature is above 85°F as injury may occur. Do not add spray additive with Buctril.

#### BUCTRIL RECOMMENDATIONS

1/2 Buctril at 1 pint/A should be applied postemergence to flax that is 2 to 8 inches in height. Do not apply Buctril to flax during or after the bud stage.

1/2 Buctril at 1 pint/A will control the MOST SUSCEPTIBLE AND SUSCEPTIBLE BROADLEAF WEEDS (See GENERAL WEED LIST) when applied at the recommended weed stage of growth. Weeds should not exceed the 4 leaf stage or 2 inches in height, whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter.

For ground application, use a minimum of 10 gallons of spray volume per acre. Use flat fan nozzles spaced a maximum of 20 inches apart with a minimum spray pressure of 30 psi at the nozzle tips. Other nozzle types may not provide adequate coverage of weeds to ensure optimum weed control. For aerial application, use a minimum of 5 gallons of spray volume per acre with a maximum spray pressure of 40 psi at the nozzle tips. Refer to AERIAL APPLICATION under GENERAL INFORMATION section for complete use directions.

### GARLIC

Apply Buctril when weed seedlings are actively growing. For optimum control apply Buctril in sufficient spray volume to ensure good coverage of the weeds.

#### BUCTRIL RECOMMENDATIONS

Buctril can be applied after the crop emerges but before garlic is 12 inches in height.

For control of MOST SUSCEPTIBLE BROADLEAF WEEDS (See GENERAL WEED LIST) apply Buctril at 1 pint/A to weeds up to the 6 leaf stage or 4 inches in height, whichever comes first. If weed forms rosette, apply before weeds exceed 2 inches in diameter.

For control of SUSCEPTIBLE BROADLEAF WEEDS, apply Buctril at 1/2 pint/A to weeds up to the 4 leaf stage or 2 inches in height, whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter.

For ground application, use a minimum of 20 gallons of spray volume per acre. Use flat fan nozzles spaced a maximum of 20 inches apart with a minimum spray pressure of 30 psi at the nozzle tips. Other nozzle types may not provide adequate coverage of the weeds to ensure optimum weed control. For aerial application, use a minimum of 5 gallons of spray volume per acre with a maximum spray pressure of 40 psi at the nozzle tips. Refer to AERIAL APPLICATION under GENERAL INFORMATION section for complete use directions. Do not apply Buctril within 112 days of anticipated harvest.

Add copy A, B, C

### ESTABLISHED TURFGRASSES AND NEWLY PLANTED GRASSES FOR SOD OR SEED PRODUCTION

Postemergence applications of Buctril controls many seedling broadleaf weeds commonly found in turfgrasses. Established grasses tolerant to Buctril include bentgrasses, Kentucky Bluegrass, Fescues, Ryegrass, Bermudagrass, St. Augustinegrass and Zoysiagrass. Buctril may also be used on seedling grasses such as Merion, Park, Delta, or common Kentucky Bluegrasses, Pennlawn, Chewings, Tallhae or Alta Fescues, Orchard grass, Highland, Seaside, or Astoria Bentgrasses, perennial Ryegrasses, Bahiagrass and newly sprigged Zoysiagrass planted for seed or sod production, or forage grasses planted for seed production only.

#### APPLICATION PROCEDURES

Buctril used alone and in tank mixtures should be applied in 10 to 100 gallons of spray volume per acre. When using a spray volume from 10 to 40 GPA, use flat fan nozzles spaced a maximum of 20 inches apart with a minimum spray pressure of 30 psi at the nozzle tips. When higher spray volumes, flood jet nozzles may be used with a minimum spray pressure of 30 psi at the nozzle tips.

#### BUCTRIL 1/2 RECOMMENDATIONS

SEEDLING AND ESTABLISHED TURF			
PRODUCT	RATE PER ACRE	RATE PER 1000 FT. 2	WEED SPECIES
<u>Buctril</u>	3/4 - 1 Pint/A	0.3 - 0.38 fl oz	See GENERAL WEED LIST
ESTABLISHED TURF ONLY; EXCLUDING BENTGRASS PUTTING GREENS			
<u>Buctril</u>	2 Pints	0.75 fl oz	As previously listed for <u>Buctril</u> plus the following: Spurweed ( <i>Soliva</i> spp.) Yellow Woodsorrel ( <i>Oxalis</i> spp.) 2/
	4 Pints	1.5 fl oz	As previously listed for <u>Buctril</u> plus the following: Prostrate Spurge ( <i>Euphorbia supina</i> )

Note: underlined Buctril is changed to Buctril 4 EC:

**BUCTRIL TANK MIXTURE RECOMMENDATIONS**

**BUCTRIL TANK MIXTURES ESTABLISHED TURF ONLY: EXCLUDING BENTGRASSES**

PRODUCT	RATE PER ACRE	RATE PER 1000 FT. <sup>2</sup>	WEED SPECIES
<u>Buctril</u> + MCPP	1-2 Pints + 1.0 LBAI	0.38-0.75 fl. oz + 0.025 LBAI	As previously listed for <u>Buctril</u> plus the following Common Chickweed ( <i>Stellaria media</i> ) Mouseear Chickweed ( <i>Cerastium vulgatum</i> ) Red Clover ( <i>Trifolium pratense</i> ) White Clover ( <i>Trifolium repens</i> ) Ground Ivy ( <i>Glechoma hederacea</i> ) Stitchwort ( <i>Stellaria graminea</i> ) Knotweed ( <i>Polygonum aviculare</i> ) Prostrate Spurge ( <i>Euphorbia supina</i> )
<u>Buctril</u> + dicamba	1 Pint + 0.25-0.5 LBAI	0.38 fl. oz + 0.006 LBAI 0.0125 LBAI	As previously listed for <u>Buctril</u> plus the following Common Chickweed ( <i>Stellaria media</i> ) Mouseear Chickweed ( <i>Cerastium vulgatum</i> ) Red Clover ( <i>Trifolium pratense</i> ) White Clover ( <i>Trifolium repens</i> ) Knotweed ( <i>Polygonum aviculare</i> ) Red Sorrel ( <i>Rumex acetosella</i> ) Pepperweed ( <i>Lepidium</i> spp.)
<u>Buctril</u> + dicamba	2 Pints + 0.25-0.5 LBAI	0.75 fl. oz. + 0.006 LBAI 0.0125	As previously listed for <u>Buctril</u> and <u>Buctril</u> + dicamba plus the following: Prostrate Spurge ( <i>Euphorbia supina</i> ) Yellow Woodsorrel ( <i>Oxalis</i> spp.) Spurweed ( <i>Soliva</i> spp.)
<u>Buctril</u> + MCPP + dicamba	1 Pint + 0.5-1.0 LBAI + 0.125-0.25 LBAI	0.38 fl. oz. + 0.0125-0.025 LBAI + 0.003-0.006 LBAI	As previously listed for <u>Buctril</u> combinations plus the following Plantains ( <i>Plantago</i> spp.) Dandelion ( <i>Taraxacum officinale</i> )
<u>Buctril</u> + MCPP	2 Pints + 0.5-1.0 LBAI + 0.125-0.25 LBAI	0.75 fl. oz. + 0.0125-0.025 LBAI + 0.003-0.006 LBAI	Prostrate Spurge ( <i>Euphorbia supina</i> ) Spurweed ( <i>Soliva</i> spp.)
<u>Buctril</u> + 2,4-D + MCPP 4/	1 Pint + 0.5-1.0 LBAI + 0.5-1.0 LBAI	0.38 fl. oz. + 0.0125-0.025 LBAI + 0.0125-0.025 LBAI	As previously listed for <u>Buctril</u> tank mixtures plus the following: Plantains ( <i>Plantago</i> spp.) Knotweed ( <i>Polygonum aviculare</i> ) Dandelion ( <i>Taraxacum officinale</i> ) Red Sorrel ( <i>Rumex acetosella</i> ) <sup>3/</sup>

1/ Buctril use rates are expressed as pints/A and fl. oz./1000 ft.<sup>2</sup> and the tankmix herbicides (dicamba, MCPP, and 2,4-D) use rates are given in pounds of active ingredient per acre (LBAI/A) and pounds of active ingredient per 1000 ft.<sup>2</sup> (LBAI/1000 ft.<sup>2</sup>) due to the various formulations commercially available. Make the necessary calculations to liquid measure based on the formulation used.

2/ Except in California.

3/ Use high rate of MCPP or 2,4-D.

4/ Including prepackaged mixtures such as Chipco Turf Kleen.

A second application of Buctril alone 2 weeks after the initial treatment may be needed to get complete control of established Prostrate Spurge or Yellow Woodsorrel.

In order to ensure maximum safety and weed control follow all cautions and limitations on this label and the labels of products used in tank mixtures with Buctril.

Note: Buctril is changed to Buctril 4 EC:

1000

**INDUSTRIAL SITES AND NONCROP AREAS**  
**FOR BROADCAST TREATMENT OF SMALL WEEDS:**

1.  
Apply  $\frac{1}{2}$  quart of Buctril with either 2 quarts of surfactant or 2 gallons of diesel oil in 150 gallons of water for each acre sprayed. Thorough coverage is important. Make sure spray boom is high enough to contact tops of all plants. Use adequate spray pressure to contact all leaf surfaces.

FOR SPOT TREATMENT OF SCATTERED INFESTATIONS OR LARGE WEEDS  
ALONG FENCEROWS IN VACANT LOTS AND ON INDUSTRIAL SITES:

1/2  
Mix  $\frac{1}{2}$  quart of Buctril with either 1 quart of surfactant or 1 gallon of diesel oil per 100 gallons of spray solution. Cover all the weed foliage thoroughly. Use at least 200 gallons of spray solution for each acre sprayed.

When using oil, add Buctril to oil—then add water to this mixture while agitating vigorously.

**CONTROLS THESE WEEDS IN THE SEEDLING STAGE:**

In the Southwestern United States, Buctril effectively controls Russian thistle (*Salsola kali*), Sattbush (*Atriplex* spp.), Marestar (*Coryza canadensis*), Puncturevine (*Tribulus terrestris*), Prostrate Spurge (*Euphorbia supina*) and Bassia (*Bassia* spp.).

Buctril should be applied in early summer when Russian Thistle is immature and growing vigorously. Best results are obtained when temperatures are 80°F or higher.

Local conditions may affect the use of this chemical. Consult State Agricultural Extension or Experiment Station weed specialists for specific recommendations for local weed problems.

**CONDITIONS OF SALE, WARRANTY, LIMITATION OF LIABILITY**

This product conforms to the chemical description of the label thereof and is reasonably fit for the purpose stated on such label only when used in accordance with directions under normal use conditions. Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of Rhone-Poulenc or the seller. Buyer assumes all risks of use, storage, or handling of this material, not in strict accordance with directions given hereon. In no case shall Rhone-Poulenc or the seller be liable for consequential, special, or indirect damages such as loss of profits or values resulting from the use or handling of this product.

1 of 2: Buctril is changed to Buctril 4 EC:

BUCTRIL 4EC

Copy A

CROP: Peppermint and Spearmint

TARGET PEST: Refer to general weed list.

APPLICATION: Bucril 4EC should be applied postemergence to dormant mint at 2 pints per acre. A second application may be applied in April or May at 1 pint per acre. Application of Bucril 4EC should be made in a minimum of 10 gallons of spray volume per acre.

PRECAUTIONS: Do not harvest within 70 days after application.

Bucril 4EC may cause temporary stunting and leaf chlorosis.

BUCTRIL 4EC LABEL

Copy B

CROP: Annual Canarygrass

TARGET PEST: Refer to general weed list.

APPLICATION: buctril 4EC at 1/2 to 1 pint per acre tankmixed with MCPA at 1/4 to 1/2 pound of active ingredient per acre is recommended for control of annual broadleaf weeds. Buctril 4EC + MCPA tank mixtures should be applied to annual canarygrass with a minimum of 3 leaves. Applications should be made using a minimum of 10 gallons of spray volume per acre.

PRECAUTIONS: Do not apply when annual canarygrass is under stress from lack of water, or when the crop forms a canopy over the weeds.

Do not graze livestock in treated annual canarygrass fields.

Do not harvest within 75 days after application.

BUCTRIL 4EC LABEL

Copy C

CROP: Onions

TARGET PEST: Refer to General Weed List

APPLICATION: Buc-tril 4EC at 1/2 to 3/4 pint per acre can be applied to onions in the 2 to 5 true leaf stage using a minimum of 50 gallons of spray volume per acre. Lower spray volumes may cause excessive injury to the crop. Thorough coverage of the weeds is essential to obtain optimum weed control.

RESTRICTIONS:

- . Do not apply Buc-tril 4EC to onions that have been damaged from insects or blowing sand.
- . Do not add any surfactant to Buc-tril 4EC or excessive injury to the crop may occur.
- . Do not apply Buc-tril 4EC to onions until the dew has completely dried.