



2-4 D + MCPP. See individual crop recommendations for proper chemical rates to be used. To ensure maximum crop safety, always 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 1/2 to 3/4 full with clean water. Begin agitation and add the recommended amount of Buctril. After Buctril is added, fill the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application.

**Tank Mixtures:** Fill the spray tank 1/2 to 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, fill 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.

| CROP                 | TYPE OF APPLICATION EQUIPMENT |        |                                |
|----------------------|-------------------------------|--------|--------------------------------|
|                      | GROUND                        | AERIAL | AUTOMATED SPRINKLER IRRIGATION |
| SMALL GRAINS         | X                             | X      | X                              |
| FIELD AND<br>POPCORN | X                             | 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 3/4 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 Pennycrest (*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*)  
 Tartary Buckwheat (*Fagopyrum tataricum*)  
 (1) Sunflower (*Helianthus annuus*)  
 Wild Buckwheat (*Polygonum convolvulus*)

#### SUSCEPTIBLE BROADLEAF WEED SPECIES:

Buffalobur (*Solanum nostratum*)  
 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 (*Scieranthus 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 hybridus*)  
 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 1/3 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 representative quantities in advance. Application must be maintained during mixing 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 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 Gear Advance MCPA 2,4-D or Hoe 011 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 instructions 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 tip. Other nozzle types may not provide adequate coverage of the weeds for 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 tip. Refer to AERIAL APPLICATION under the GENERAL INFORMATION section for complete use directions.

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

| PRODUCT | CROP/GEOGRAPHICAL AREA  | RATE  | CROP  | TIMING OF APPLICATION  |  |
|---------|---|---|---|--|--|
|         |   |   |   | WEED   |  |
| Buctril | Fall-seeded wheat and barley throughout the United States and spring-seeded wheat and barley in Idaho, Oregon, and Washington | 1 1/2 Pints A   | Apply to wheat and barley from emergence to the boot stage.   | <b>Most Susceptible Broadleaf Weeds</b><br>Apply to weeds up to the 4-leaf stage or 4 inches in height when evergettes first. If weed forms a rosette, apply before weeds exceed 2 inches in diameter. |  |
|         |   | 2 Pints A   |   | <b>Susceptible Broadleaf Weeds</b><br>Apply to weeds up to the 3-leaf stage or 2 inches in height when evergettes first. If weed forms a rosette, apply before weeds exceed 1 inch in diameter.        |  |
|         | 1 Pint A  | Apply to wheat and barley from emergence to the boot stage. | <b>Most Susceptible and Susceptible Broadleaf Weeds</b><br>Apply Buctril at 1 pint A to weeds that do not exceed the 4-leaf stage or 2 inches in height when evergettes first. If weed forms a rosette, apply before weeds exceed 1 inch in diameter. |  |  |
|         | 1 1/2 Pints A   |   | Use Buctril at 1 1/2 pints A for control of Amaranthus spp. that are 2 inches in height and 1 pigweed (Amaranthus spp.) that do not exceed the 4-leaf stage or 2 inches in height when evergettes first.  |  |  |

# BUCTRIL TANK MIXTURE RECOMMENDATIONS

| PRODUCT                            | CROP/GEOGRAPHICAL AREA   | RATE  | TIMING OF APPLICATION   |   |
|------------------------------------|--|---|---|---|
|                                    |  |   | CROP  | WEED  |
| Buctril<br>+<br>GLEAN<br>(Tankmix) | Fall seeded wheat and barley throughout the United States and spring seeded wheat and barley in Idaho, Oregon and Washington | ¾ Pint A<br>+<br>¼ 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. | <b>Most Susceptible Broadleaf Weeds</b><br>Apply to weeds up to the 8 leaf stage or 4 inches in height which ever comes first. If weed forms rosette, apply before weeds exceed 2 inches in diameter. |
|                                    |  | 1 Pint A<br>+<br>¼ ounce A  |   | <b>Susceptible Broadleaf Weeds</b><br>Apply to weeds up to the 4 leaf stage or 2 inches in height which ever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter.        |
|                                    | ¾ Pint A<br>+<br>¼ ounce A   | <b>Most Susceptible and Susceptible Broadleaf Weeds</b><br>Apply Buctril + Glean at ¾ pint A + ¼ ounce 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. |   |   |
|                                    | 1½ Pints A<br>+<br>¼ ounce A   | Use Buctril + Glean at 1½ pints A + ¼ ounce 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 restrictions.  
Glean is a registered trademark of E. I. du Pont de Nemours & Co., Inc.

## BUCTRIL and AVERAGE

A tank mixture of Buctril + Average 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 + Average 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 tilled stage of growth.

See Average label for varietal restrictions and recommended Average rates as related to wild oat density.  
Average 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 ¼ to ½ 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 tilled 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.

## **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 2 pints 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 stlage 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 rain is expected within 1 hour of application.

Seed corn producers should consult the respective seed corn company regarding tolerance of certain seed products to contact with 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 application rate should not exceed 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 but to exceed 12 inches in height.

**BUCTRIL RECOMMENDATIONS**

Postemergence applications of Buctril at 1 and 1½ pints/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<br><br>When determining leaf stage, count all leaves except cotyledonary leaves |                                | 1 Pint/A           |                              | 1½ 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                            | 5                   | 8                            |
| Wild Mustard   | <i>Brassica kaber</i>          | —                  | —                            | 4                   | 4                            |
| <b>WEEDS SUPPRESSED</b>  |                                |                    |                              |                     |                              |
| <b>Canada Thistle</b>  | <i>Cirsium arvense</i>         | not recommended    |                              | 8 inch to bud stage |                              |
| Buctril suppresses the growth by burning down of top growth. Regrowth may occur.             |                                |                    |                              |                     |                              |

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

| PRODUCT | RATE       | CROP  | TIMING OF APPLICATION  |    |
|---------|------------|---|--|----|
|         |            |   | WEED   | 1/ |
| Buctril | 1 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 Buctril at 1 pint A.   |    |
|         | 1½ Pints 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 Buctril at 1½ pints/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 1 pint A for control of MOST SUSCEPTIBLE WEEDS and 1½ pints 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 rosettes, apply before weed exceeds 1 inch in diameter.

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

**TIMING OF APPLICATION**

| PRODUCT                                 | RATE                                  | CROP  | WEED   |
|---|---------------------------------------|---|--|
| Buctril<br>+<br>Atrazine 1<br>(Tankmix) | 1 Pint A<br>+<br>1/2-1 1/2 lbs A      | Apply to corn from the 3 leaf stage to the 8 leaf stage | All weeds controlled by Buctril at 1 pint A plus control of pigweeds ( <i>Amaranthus Spp.</i> ) 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.      |
|   | 1 1/2 Pints A<br>+<br>1/2-1 1/2 lbs A | Apply to corn from the 4 leaf stage to the 8 leaf stage | All weeds controlled by Buctril at 1 1/2 pints A plus control of pigweeds ( <i>Amaranthus Spp.</i> ) 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. |

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  | 2 Pints                            |
| Aatrex Nine O        | 1/2  | 1/2 Pound                          |
|                      | 1  | 1 1/2 Pounds                       |

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

**TIMING OF APPLICATION**

| PRODUCT                              | RATE                         | CROP  | WEED  |
|--------------------------------------|------------------------------|---|---|
| Buctril<br>+<br>2,4-D 2<br>(Tankmix) | 1 Pint A<br>+<br>1 lb A      | Apply to corn from the 3-4 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 1 pint A plus control of wild mustard that is larger than the 4 leaf stage or 4 inches in height whichever comes first.      |
|                                      | 1 1/2 Pints A<br>+<br>1 lb 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 1 1/2 pints A plus control of wild mustard that is larger than the 4 leaf stage or 4 inches in height whichever comes first. |

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  | 1/2   | 1/2 Pint                        |
|                   | 1   | 2 Pints                         |
| 2,4-D 6lb/gallon  | 1/2   | 1 Pint                          |

**SPECIAL PRECAUTIONS FOR BUCTRIL + 2,4-D TANK MIXTURE:** Post-emergence 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 2 pints 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**

| PRODUCT                      | RATE                        | TIMING OF APPLICATION   |  |
|------------------------------|-----------------------------|---|--|
|                              |                             | CROP  | WEED 1/  |
| Buctril                      | 1 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 Buctril at 1 pint A.   |
|                              | 1 1/2 Pints 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 Buctril at 1 1/2 pints A.  |
| Buctril + Atrazine (Tankmix) | 1 Pint 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 Buctril at 1 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.      |
|                              | 1 1/2 Pints A + 1 1/2 lbs 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 Buctril at 1 1/2 pints 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. |

1/ For control of additional weeds, consult the APPLICATION RATE TABLE for field corn, popcorn, and grain sorghum. See GENERAL WEED LIST. Use Buctril at 1 pint A for control of MOST SUSCEPTIBLE WEEDS and 1 1/2 pints A for control of SUSCEPTIBLE WEEDS. Apply Buctril to weeds that are up to the 4 leaf stage or 2 inches in height, whichever comes first. If weed forms rosette, apply before weed exceeds 2 inches 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 2 pints 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.

## 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

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.

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 2 pints/A 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.

For control of SUSCEPTIBLE BROADLEAF WEEDS, apply Buctril at 4 pints/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.

## 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, Tiflaine 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 using higher spray volumes, flood jet nozzles may be used with a minimum spray pressure of 30 psi at the nozzle tips.

### BUCTRIL 1 RECOMMENDATIONS

#### SEEDLING AND ESTABLISHED TURF

| PRODUCT | RATE PER ACRE   | RATE PER 1000 FT. <sup>2</sup> | WEED SPECIES          |
|---------|-----------------|--------------------------------|-----------------------|
| Buctril | 1 1/2 - 2 Pints | 0.6 - 0.75 fl. oz.             | See GENERAL WEED LIST |

#### ESTABLISHED TURF ONLY; EXCLUDING BENTGRASS PUTTING GREENS

|         |         |             |   |
|---------|---------|-------------|---|
| Buctril | 4 Pints | 1.5 fl. oz. | As previously listed for Buctril plus the following:<br>Spurweed ( <i>Solidago</i> spp.)<br>Yellow Woodsorrel ( <i>Oxalis</i> spp.) 2 |
|         | 8 Pints | 3.0 fl. oz. | As previously listed for Buctril plus the following:<br>Prostrate Spurge ( <i>Euphorbia supina</i> )                                  |

## 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  |
|---------------------------------------|--|--|---|
| Buctril<br>+<br>MCPP                  | 2.4 Pints<br>+<br>1.0 LBAI                           | 0.75 1.5 fl. oz.<br>+<br>0.025 fl. oz.                           | As previously listed for Buctril plus the following<br>Common Chickweed ( <i>Stellaria media</i> )<br>Mouseear Chickweed ( <i>Cerastium vulgatum</i> )<br>Red Clover ( <i>Trifolium pratense</i> )<br>White Clover ( <i>Trifolium repens</i> )<br>Ground Ivy ( <i>Glechoma hederacea</i> )<br>Stitchwort ( <i>Stellaria graminea</i> )<br>Knotweed ( <i>Polygonum aviculare</i> )<br>Prostrate Spurge ( <i>Euphorbia supina</i> ) |
| Buctril<br>+<br>MCPP                  | 2 Pints<br>+<br>0.25 0.5 LBAI                        | 0.75 1.5 fl. oz.<br>+<br>0.006 0.012 LBAI                        | As previously listed for Buctril plus the following<br>Common Chickweed ( <i>Stellaria media</i> )<br>Mouseear Chickweed ( <i>Cerastium vulgatum</i> )<br>Red Clover ( <i>Trifolium pratense</i> )<br>White Clover ( <i>Trifolium repens</i> )<br>Knotweed ( <i>Polygonum aviculare</i> )<br>Red Sorrel ( <i>Rumex acetosella</i> )<br>Pepperweed ( <i>Lepidium spp.</i> )  |
| Buctril<br>+<br>dicamba               | 4 Pints<br>+<br>0.25 0.5 LBAI                        | 1.5 fl. oz.<br>+<br>0.006 0.012 LBAI                             | As previously listed for Buctril and Buctril + dicamba<br>plus the following<br>Prostrate Spurge ( <i>Euphorbia supina</i> )<br>Yellow Woodsorrel ( <i>Oxalis spp.</i> )<br>Spurweed ( <i>Soliva spp.</i> )   |
| Buctril<br>+<br>MCPP<br>+<br>dicamba  | 2 Pints<br>+<br>0.5 1.0 LBAI<br>+<br>0.125 0.25 LBAI | 0.75 fl. oz.<br>+<br>0.0125 0.025 LBAI<br>+<br>0.003 0.006 LBAI  | As previously listed for Buctril combinations plus the following<br>Plantains ( <i>Plantago spp.</i> )<br>Dandelion ( <i>Taraxacum officinale</i> )   |
|                                       | 4 Pints<br>+<br>0.5 1.0 LBAI<br>+<br>0.125 0.25 LBAI | 1.5 fl. oz.<br>+<br>0.0125 0.025 LBAI<br>+<br>0.003 0.006 LBAI   | Prostrate Spurge ( <i>Euphorbia supina</i> )<br>Spurweed ( <i>Soliva spp.</i> )   |
| Buctril<br>+<br>2,4-D<br>+<br>MCP P-4 | 2 Pints<br>+<br>0.5 1.0 LBAI<br>+<br>0.5 1.0 LBAI    | 0.75 fl. oz.<br>+<br>0.0125 0.025 LBAI<br>+<br>0.0125 0.025 LBAI | As previously listed for Buctril tank mixtures plus the following<br>Plantains ( <i>Plantago spp.</i> )<br>Knotweed ( <i>Polygonum aviculare</i> )<br>Dandelion ( <i>Taraxacum officinale</i> )<br>Red Sorrel ( <i>Rumex acetosella</i> ) <sup>3</sup>  |

1. Buctril use rates are expressed in 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/A and fl. oz./1000 ft.<sup>2</sup> or LBAI. A and fl. oz./1000 ft.<sup>2</sup> is a linear gradient per 1000 ft.<sup>2</sup> (LBAI/1000 ft.<sup>2</sup>) due to the various formula forms currently 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 Onyx Turf Care.

A second application of Buctril 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, always read and limitations on this label and the labels of products used in tank mixtures with Buctril.

# INDUSTRIAL SITES AND NONCROP AREAS

## FOR BROADCAST TREATMENT OF SMALL WEEDS:

Apply 2 quarts 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:

Mix 1 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*), Saltbush (*Atriplex* spp.), Maree star (*Conyza 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 is sold as described and the user assumes all liability for the use of this product. Results may vary from those stated on the label under normal use conditions. Proper application, timing and method of application, weather and site conditions may affect the results. The user assumes all liability for any damage or other injury to persons or property resulting from the use of this product. The user assumes all liability for any damage or other injury to persons or property resulting from the use of this product. The user assumes all liability for any damage or other injury to persons or property resulting from the use of this product. The user assumes all liability for any damage or other injury to persons or property resulting from the use of this product.

LBL 5149

*4/1/70 - Revised label and instructions*

Product Number  
2070

Proposed Label

BUCTRIL HERBICIDE

Active Ingredient:

Octanoic acid ester of bromoxynil\*(3,5-dibromo-4-hydroxybenzotrile).....33.8%  
Inert ingredients.....66.2%

\*Bromoxynil octanoate equivalent to 23.2% of bromoxynil or not less than 2.0 pounds of bromoxynil per gallon.

Keep Out of Reach of Children  
CAUTION  
Statement of Practical Treatment

IF SWALLOWED: Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF IN EYES: Flush with water for 15 minutes. Get medical attention.

See Side Panel for Additional Precautionary Statements

EPA Reg. No. 359-564  
EPA Est. No.  
0384

Net Contents  
Gallons  
Liters

1 *359-564*  
Manufactured By

Rhone-Poulenc Inc.  
Agrochemical Division  
Monmouth Junction, NJ 08852

Precautionary Statements  
Hazards to Humans and Domestic Animals  
Warning

Harmful if swallowed, absorbed through skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Environmental Hazards:

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 the 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.

Storage and Disposal

Storage:

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not store near fertilizers or seeds. Store at temperatures above 3°F. If allowed to freeze remix before using.

Pesticide Disposal:

Pesticide spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, State, or local procedures.

Container Disposal:

Triple rinse (or equivalent) Puncture and dispose of in a sanitary landfill or by other approved state and local procedures.

### General Information

Buctril is a contact postemergence herbicide. Therefore the weeds must be thoroughly covered with the spray for effective control. Buctril is primarily active against broadleaf weeds. Do not apply when plants are stressed from lack of moisture. Avoid drift onto neighboring crops and pastures.

### Buctril Controls These Weeds in the Seedling Stage

#### Susceptible Broadleaf Weed Species:

Annual sowthistle (Sonchus oleraceus)  
Black nightshade (Solanum nigrum)  
Blue mustard (Chorispora tenella)  
Common cocklebur (Xanthium pensylvanicum)  
Common lambsquarters (Chenopodium album)  
Common tarweed (Hemizonia congesta)  
Corn groundsel (Lithospermum arvense)  
Eastern black nightshade (Solanum ptycanthum)  
Fiddleneck spp. (Amsinckia intermedia)  
Field pennycress (Thlaspi arvense)  
Green smartweed (Polygonum scabrum)  
Hairy nightshade (Solanum sarachoides)  
Jimsonweed (Datura stramonium)  
Ladysthumb (Polygonum persicaria)  
Pennsylvania smartweed (Polygonum pennsylvanicum)  
Pepperweed spp. (annual) (Lepidium spp.)  
Shepherdspurse (Capsella bursa-pastoris)  
Silver leaf nightshade (Solanum elaeagnifolium)  
Tartary buckwheat (Fagopyrum tataricum)  
Volunteer sunflower (Helianthus annuus)  
Wild buckwheat (Polygonum convolvulus)

Less Susceptible Broadleaf Weed Species:

- Common groundsel (Senecio vulgaris)
- Common ragweed (Ambrosia artemisiifolia)
- Corn chamomile (Anthemis arvensis)
- Cow cockle (Saponaria vaccaria)
- Giant ragweed (Ambrosia trifida)
- Ivyleaf morningglory (Ipomoea hederacea)
- Knawel (Scleranthus annuus)
- Kochia (Kochia scoparia)
- London Rockcress (Sisymbrium irio)
- Mayweed (Anthemis cotula)
- Prostrate knotweed (Polygonum aviculare)
- \*Redroot pigweed (Amaranthus retroflexus)
- Russian thistle (Salsola kali)
- \*Spiny pigweed (Amaranthus spinosus)
- Tall morningglory (Ipomoea hederacea)
- \*Tall waterhemp (Amaranthus tuberculatus)
- Tumble mustard (Sisymbrium altissimum)
- Velvetleaf (Abutilon theophrasti)
- \*Wild mustard (Brassica kaber)
- Wild radish (Raphanus raphanistrum)

\*For control of pigweed species and wild mustard, applications should be made no later than 4 inches tall or the 4th leaf stage, whichever comes first.

Top Growth Suppression:

Buctril suppresses the growth of Canada thistle (Cirsium arvense) by burning down the leaves. Regrowth can be expected.

## WHEAT, BARLEY, OATS AND RYE

Buctril can be applied to small grains from emergence up to the boot stage. Spray weeds soon after emergence for good weed control and to prevent competition to the crop. Do not apply when plants are stressed from lack of moisture. Avoid spray drift onto neighboring crops and pastures. Do not graze treated fields for 30 days following application.

Buctril can be applied to small grains in a tank mixture with Avenge®, 2,4-D, Hoelon®, Glean® or MCPA to broaden the spectrum of weed control. In order to assure maximum safety and weed control follow all cautions and limitations on this label and the labels of products used in tank mixtures with Buctril.

Apply Buctril alone or in tank mixtures in sufficient gallonage to assure good coverage of the weeds. For ground application use a minimum of 10 gallons of water per acre using flat fan nozzles with a minimum of 30 p.s.i. at the nozzle tips. For aerial application use a minimum of 5 gallons of total spray per acre, the swath width is not to exceed the spray boom width.

### Mixing Instructions for Tank Mixtures:

Fill tank one-half to three quarters full with clean water and start agitation. If tank mixing with Glean, add Glean to the tank first while agitating; add Buctril to the tank; then complete filling the tank with water while agitating. If tank mixing with Avenge, 2,4-D, Hoelon or MCPA, add Buctril to the tank first while agitating, add the other herbicide to the tank; then complete filling the tank with water while agitating. Allow mixture to agitate and recycle for at least 5 minutes before spraying. Agitation must be continued until spraying is complete.

Buctril can also be combined with sprayable fluid fertilizers. However, predetermine the compatibility with the fluid fertilizer by mixing small proportional quantities in advance. Agitation must be maintained during filling and application operations to assure the Buctril is evenly mixed with the fluid fertilizer.

Buctril may be applied through automated sprinkler irrigation systems to wheat and barley, at the rate, crop and weed stage of growth indicated below in the table. The lower rate of 1.5 pints per acre for susceptible weeds should be applied in less than 0.2 acre inches of water; the higher rate of 2.0 pints per acre should be used for the less susceptible weeds or if applying with up to 0.5 acre inches of water. This method of application is restricted from use in California.

| PRODUCT          | RATE                                 | TIMING OF APPLICATION  |  |
|------------------|--------------------------------------|--|--|
|                  |                                      | CROP   | WEEDS  |
| Buctril          | 1 1/2-2 pts/A                        | Apply to wheat, barley, oats or rye from emergence to boot stage.  | <p>Susceptible broadleaf weeds: apply before they are 4" tall or 2" in diameter, if rosette.</p> <p>Less susceptible broadleaf weeds: apply before they are 2" tall or 1" in diameter, if rosette.</p>   |
| Buctril + Avenge | 1-2 pts/A + 2 1/2-4pts/A (1,2)       | Apply to barley with approximately 2 to 7 leaves; spring wheat with approximately 5 to 6 leaves and winter wheat between 4 leaves and tillered. Application should be made before crop has reached boot stage. | <p>Wild Oats: apply when they are in the 3 to 5 leaf stage.</p> <p>Susceptible broadleaf weeds: apply before they are 4" tall or 2" in diameter, if rosette.</p> <p>Less susceptible broadleaf weeds: apply before they are 2" tall of 1" in diameter, if rosette.</p> |
| Buctril + 2,4-D  | 1-2 pts/A + 1/4-1/2lbai/A (1,3)      | Apply to wheat, barley, oats or rye after the crop has tillered and before the forming of joints in the stem.  | Apply when the broadleaf weeds are less than 4" tall or 2" in diameter, if rosette.  |
| Buctril + Glean  | 3/4-1 1/2 pts/A + 1/8-1/3 oz/A (1,4) | Apply to wheat and barley after the crop has reached the 2 to 3 leaf stage but before the boot stage.  | <p>Susceptible broadleaf weeds: apply before they are 4" tall or 2" in diameter, if rosette.</p> <p>Less susceptible broadleaf weeds: apply before they are 2" tall or 1" in diameter, is rosette.</p>   |

| PRODUCT                | RATE                                     | TIMING OF APPLICATION  |  |
|------------------------|--|--|--|
|                        |  | CROP   | WEEDS  |
| Buctril<br>+<br>Hoelon | 1-2 pts/A<br>+<br>2-3 1/3 pts/A<br>(1,5) | Apply to wheat and barley up to the jointing stage of growth.  | Annual grasses: apply when they are in the 1-3 leaf stage (up to 4 leaf stage in wheat only).<br><br>Susceptible broadleaf weeds: apply before they are 4" tall or 2" in diameter, if rosette.<br><br>Less susceptible broadleaf weeds: apply before they are 2" tall or 1" in diameter, if rosette. |
| Buctril<br>+<br>MCPA   | 1-2 pts/A<br>+<br>1/4-1/2lbai/A<br>(1,6) | Apply to wheat, barley, oats or rye after the crop has reached the 3 to 4 leaf stage and before it has reached the boot stage. | Susceptible broadleaf weeds: apply before they are 4" tall or 2" in diameter, if rosette.<br><br>Less susceptible broadleaf weeds: apply before they are 2" tall or 1" in diameter, if rosette.  |

(1) Use the lower rate of Buctril on broadleaf weed species listed as susceptible. The higher rate is needed when the weed infestation is heavy or for the control of less susceptible weeds. In this last instance, it is important, for effective control, to treat before the weeds have reached the indicated size.

(2) See Avenge label for varietal restrictions and to determine appropriate rate of application in relation to wild oat density.

(3) A tank mix application of Buctril and 2,4-D broadens the spectrum of weed control. See 2,4-D label for listing of additional susceptible weed species.

(4) See Glean label for crop rotation instructions.

(5) See Hoelon label to determine appropriate rate of application in relation to annual grassy weed stage of growth.

(6) A tank mix application of Buctril and MCPA broadens the spectrum of weed control. See MCPA label for listing of additional susceptible weed species.

Avenge, registered trademark of American Cyanamid Co.

Glean 75DF, registered trademark of E. I. duPont de Nemours & Co., Inc.

Hoelon 3 EC, registered trademark of Hoechst Ag.

## Field and Silage Corn

Buctril can be applied to field and silage corn, postemergent, for the selective control of the above listed weeds under conventional, minimum or no tillage systems. The recommendations for use are:

| PRODUCT | RATE       | TIMING OF APPLICATION |  |
|---------|------------|-----------------------|--|
|         |            | CROP                  | WEEDS  |
| Buctril | 1 pt/A     | 2-8 leaf              | Apply to susceptible weeds before they are 6" tall or 3" in diameter, if rosette.        |
|         | 1 1/2 pt/A | 4-8 leaf              | Apply to less susceptible weeds before they are 4" tall or 1.5" in diameter, if rosette. |

It is important, for effective control, to treat corn before the weeds have reached the indicated size.

Apply Buctril in sufficient gallonage to assure good coverage of the weeds. For ground application use flat fan nozzles with a minimum of 20 gallons of solution per acre, and a minimum of 30 p.s.i. at the nozzle tips. Under conditions of heavy weed infestations, the use of higher spray gallonage and pressure will improve coverage needed to obtain control.

Under certain conditions, particularly cool and cloudy days, temporary leaf scorching may be observed on the corn, but it will disappear rapidly.

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

Do not add any spray additive, or mix with liquid fertilizers, for crop injury may occur.

Do not plant rotational crops until following use season.

Seed corn producers must verify with their suppliers the selectivity of Buctril on inbred lines to avoid potential injury.

### Tank Mixes for Use on Field Corn

Buctril can be applied to field corn in tank mixture with atrazine and 2,4-D to broaden the spectrum of weed control and additional residual effect.

To assure maximum safety and best results follow all cautions and limitations on this label and the labels of products used in tank mixtures with Buctril. Apply tank mixtures in sufficient gallonage to assure good coverage of the weeds. For ground application use a minimum of 20 gallons of water per acre using flat fan nozzles with a minimum of 30 psi at the nozzle tips.

**Mixing Instructions for Tank Mixtures:**

Fill tank one-half to three-quarters full with clean water and start agitation.

If tank mixing with atrazine, add atrazine to the tank first while agitating; add Buctril to the tank; then complete filling the tank with water while agitating.

If tank mixing with 2,4-D, add Buctril to the tank first while agitating, add 2,4-D to the tank; then complete filling the tank with water while agitating.

Allow mixture to agitate and recycle for at least 5 minutes before spraying.

Agitation must be continued until spraying is complete.

Do not add any spray additives to the tank mixtures.

| PRODUCT                  | RATE                                 | TIMING OF APPLICATION                               |   |
|--------------------------|--------------------------------------|---|---|
|                          |                                      | CROP  | WEEDS   |
| Buctril<br>+<br>atrazine | 1 pt/A<br>+<br>1/2-1 1/5 lb ai/A     | Apply to field corn between the 2 and 8 leaf stage. | Apply to susceptible weeds before they are 6" tall or 3" in diameter if rosette.        |
|                          | 1 1/2 pt/A<br>+<br>1/2-1 1/5 lb ai/A | Apply to field corn between the 4 and 8 leaf stage. | Apply to less susceptible weeds before they are 4" tall or 1.5" in diameter if rosette. |
| Buctril<br>+<br>2,4-D    | 1 pt/A<br>+<br>1/4-1/2 lb ai/A       | Apply to field corn between the 2 and 8 leaf stage. | Apply to susceptible weeds before they are 6" tall or 3" in diameter if rosette.        |
|                          | 1 1/2 pt/A<br>+<br>1/4-1/2 lb ai/A   | Apply to field corn between the 4 and 8 leaf stage. | Apply to less susceptible weeds before they are 4" tall or 1.5" in diameter if rosette. |

## SORGHUM AND MILO

Buctril can be applied to sorghum and milo postemergent, for the selective control of the above listed weeds. The recommendations for use are:

| PRODUCT | RATE   | TIMING OF APPLICATION                         |   |
|---------|--------|---|---|
|         |        | CROP  | WEEDS   |
| Buctril | 1 pt/A | 2-10 leaf, not to exceed 12 inches in height. | Apply to susceptible weeds before they are 4" tall or 2" in diameter, if rosette.       |
|         | 2 pt/A | 4-10 leaf, not to exceed 12 inches in height. | Apply to less susceptible weeds* before they are 2" tall or 1" in diameter, if rosette. |

\* It is important for effective control to treat sorghum and milo before the weeds have reached the indicated size.

A second application of Buctril is recommended should a new flush of weeds occur. The total cumulative rate should not exceed 3 pts/A per season and the last application should not be made later than the 10 leaf stage of sorghum or milo growth (not to exceed 12" in height).

Apply Buctril in sufficient gallonage to assure good coverage of the weeds. For ground application use flat fan nozzles with a minimum of 20 gallons of solution per acre, and a minimum of 30 p.s.i. at the nozzle tips. Under conditions of heavy weed infestations, the use of higher spray gallonage and pressure will improve coverage needed to obtain control. Under certain conditions, cool and cloudy days mainly, temporary leaf scorch may be observed on the sorghum or milo, but it will disappear rapidly.

Buctril does not control grasses. It is recommended that a suitable grass herbicide be applied to provide any required grass control.

Do not add any spray additive, or mix with liquid fertilizers, as crop injury may occur.

Do not cut for feed or graze within 60 days of application.

Do not plant rotational crops until following use season.

## FLAX

Buctril can be applied to flax when it is 2 to 8 inches tall either alone or in a tank mix with Hoelon. Do not treat flax during or after the bud stage. Apply to weeds not past the 3 to 4 leaf stage. If weeds form rosettes, apply before the rosettes are 1 1/2 inches across. When using Buctril alone apply 1 pint per acre to control the susceptible weed species and 1 1/2 pints per acre to control the less susceptible weed species. When Buctril is tankmixed with Hoelon use the same rates of Buctril with 2 to 3 1/3 pints per acre of Hoelon. Follow the label recommendations for individual products. It is important that the weeds are sprayed soon after they have emerged, and before they become shaded by the crop.

Apply Buctril in sufficient gallonage to assure good coverage of the weeds. For ground application use a minimum of 10 gallons of water per acre using flat fan nozzles with a minimum of 30 psi at the nozzle tips. For aerial application use a minimum of 5 gallons of total spray per acre. Do not treat flax in humid weather or when the temperature is over 85°F.

### Mixing Instructions for Tank Mixtures:

Fill tank one-half full with clean water and start agitation. Add the Buctril to the tank first while agitating; add the Hoelon to the tank; then complete filling the tank with water while agitating. Allow mixture to agitate and cycle for at least 5 minutes before spraying. Agitation must be continued until spraying is complete.

## GARLIC

Buctril can be applied as a broadcast treatment after the crop emerges but before the crop reaches the 12 inch stage. Use 2 pints per acre for susceptible weed species and 4 pints per acre for the less susceptible weed species.

Apply Buctril as a water mix spray in sufficient gallonage to assure adequate coverage. Use approximately 40 to 100 gallons of water per acre for ground applications and a minimum of 5 gallons of water per acre for aerial applications. Good coverage of the weeds is essential.

Do not apply within 112 days of anticipated harvest.

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

Buctril is a contact herbicide which controls many broadleaved weeds. It can be safely be applied to established bentgrasses, Kentucky bluegrass, fescues, ryegrass, bermudagrass and St. Augustinegrass. Buctril may also be used on seedling grasses such as Merion, Park, Delta or common Kentucky bluegrasses, Pennlawn, Chewings, Illahee or Alta Fescues, orchard grass, Highland, Seaside or Astoria Bentgrasses, perennial ryegrasses planted for seed or sod production or forage grasses planted for seed production purposes only.

Apply Buctril to actively growing, seedling broadleaved weeds according to the following recommendations:

**SEEDLING AND ESTABLISHED TURF:**

| PRODUCT | RATE<br>lbai/A           | WEED SPECIES          |
|---------|--------------------------|-----------------------|
| Buctril | 3/8-1/2<br>(1 1/2-2pt/A) | See General Weed List |

**ESTABLISHED TURF ONLY; EXCLUDING BENTGRASS PUTTING GREENS:**

| PRODUCT | RATE<br>lbai/A | WEED SPECIES  |
|---------|----------------|---|
| Buctril | 1.0(4 pt/A)    | As previously listed for Buctril plus the following:<br>Spurweed ( <u>Soliva</u> spp.)<br>Yellow Woodsorrel ( <u>Oxalis</u> spp.)1/ |
|         | 2.0(8pt/A)     | As previously listed for Buctril plus the following:<br>Prostrate Spurge ( <u>Euphorbia supina</u> )                                |

**BUCTRIL TANK MIXES**

**ESTABLISHED TURF ONLY; EXCLUDING BENTGRASSES**

| PRODUCT             | RATE<br>lbai/A | WEED SPECIES   |
|---------------------|----------------|--|
| Buctril<br>+<br>MCP | 1/2-1.0 + 1.0  | As previously listed for Buctril plus the following:<br><u>Common Chickweed (Stellaria media)</u><br><u>Mouseear Chickweed (Cerastium vulgatum)</u><br><u>Red Clover (Trifolium pratense)</u><br><u>White Clover (Trifolium repens)</u><br><u>Ground Ivy (Glechoma hederacea)</u><br><u>Stitchwort (Stellaria graminea)</u><br><u>Knotweed (Polygonum aviculare)</u><br><u>Prostrate Spurge (Euphorbia supina)</u> |

| PRODUCT  | RATE<br>lbai/A           | WEED SPECIES  |
|--|--------------------------|---|
| Buctril<br>+<br>Dicamba                          | 1/2 + 1/4-1/2            | As previously listed for Buctril plus the following:<br><br>Common Chickweed ( <u>Stellaria media</u> )<br>Mouseear Chickweed ( <u>Cerastium vulgatum</u> )<br>Red Clover ( <u>Trifolium pratense</u> )<br>White Clover ( <u>Trifolium repens</u> )<br>Knotweed ( <u>Polygonum aviculare</u> )<br>Red Sorrel ( <u>Rumex acetosella</u> )<br>Pepperweed ( <u>Lepidium spp.</u> ) |
|  | 1.0 + 1/4-1/2            | As previously listed for Buctril plus the following:<br><br>Prostrate Spurge ( <u>Euphorbia supina</u> )<br>Yellow Woodsorrel ( <u>Oxalis spp.</u> )<br>Spurweed ( <u>Soliva spp.</u> )   |
| Buctril<br>+<br>MCPP<br>+<br>Dicamba             | 1/2+1/2-1.0<br>+ 1/8-1/4 | As previously listed for Buctril combinations plus the following:<br><br>Plantains ( <u>Plantago spp.</u> )<br>Dandelion ( <u>Taraxacum officinale</u> )  |
|  | 1.0+1/2-1.0<br>+ 1/8-1/4 | As previously listed for Buctril combinations plus the following:<br><br>Prostrate Spurge ( <u>Euphorbia supina</u> )<br>Spurweed ( <u>Soliva spp.</u> )  |
| Buctril<br>+<br>2,4-D<br>+<br>MCPP <sup>3/</sup> | 1/2+1/2-1.0<br>+1/2-1.0  | As previously listed for Buctril combinations plus the following:<br><br>Plantains ( <u>Plantago spp.</u> )<br>Knotweed ( <u>Polygonum aviculare</u> )<br>Dandelion ( <u>Taraxacum officinale</u> )<br>Red Sorrel ( <u>Rumex acetosella</u> ) <sup>2/</sup>   |

<sup>1/</sup> Except in California.

<sup>2/</sup> Use high rate of MCPP or 2,4-D as expressed in lbai/A.

<sup>3/</sup> 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.

Do not apply to cool season grasses when the air temperature is above 80° F.

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

#### INDUSTRIAL SITES AND NONCROP AREAS

##### FOR BROADCAST TREATMENT OF SMALL WEEDS:

Apply 2 quarts of Bucril 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:

Mix 1 quart of Bucril 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 Bucril to oil-then add water to this mixture while agitating vigorously.

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

In the Southwestern United States, Bucril effectively controls Russian thistle (Salsola kali), Saltbush (Atriplex spp.), Maretail (Conyza canadensis), Puncturevine (Tribulus terrestris), Prostrate Spurge (Euphorbia supina) and Bassia (Bassia spp.).

Bucril 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 on 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 herewith. 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.