

# BROMINAL<sup>®</sup> PLUS

## BROADLEAF HERBICIDE

Combination of bromoxynil and MCPA.

Controls annual broadleaf weeds in wheat,  
barley, oats and rye.

**WARNING:** Keep out of reach of children.  
See other cautions on right side panel.

FOR COMMERCIAL OR AGRICULTURAL USE ONLY.  
NOT FOR RESIDENTIAL USE.

**ACTIVE INGREDIENTS:**

Octanoic acid ester of bromoxynil\*  
(3,5-dibromo-4-hydroxybenzotrifluoride)..... 30.7%  
Butoxyethanol ester of 2-methyl-4-chlorophenoxyacetic acid\*\* ... 31.8%

**INERT INGREDIENTS:**..... 37.7%

\*Bromoxynil acid equivalent 21.1% by weight or 2 pounds per gallon.  
\*\*MCPA acid equivalent 21.1% by weight or 2 pounds per gallon.

MADE IN U.S.A.

**UNION CARBIDE AGRICULTURAL  
PRODUCTS COMPANY, INC.**

RESEARCH TRIANGLE PARK, NC 27709

Clinon, IA. ■ St. Joseph, MO.

EPA Reg. No. 264-239-ZA

EPA Est. No. 264-PA-1, 264-MO-1

Refer to the first letter of the first number for packaging location.

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204-239

**WEEDS CONTROLLED**

**Most Susceptible**  
**Use 1 pint BROMINAL PLUS per Acre**

- |                            |                                 |
|----------------------------|---------------------------------|
| Black mustard              | <i>Brassica nigra</i>           |
| Cocklebur                  | <i>Xanthium pennsylvanicum</i>  |
| Cow cockle                 | <i>Saponaria vaccaria</i>       |
| Field pennycress, tarweed  | <i>Thlaspi arvense</i>          |
| Green smartweed            | <i>Polygonum acabrum</i>        |
| Kochia                     | <i>Kochia scoparia</i>          |
| Lambquarters               | <i>Chenopodium album</i>        |
| London rocket              | <i>Sisymbrium lino</i>          |
| Morningglory (annual)      | <i>Somnosa hederacea</i>        |
| Nightshade (annual)        | <i>Solanum nigrum, villosum</i> |
| Parthenium, sp. weed       | <i>Parthenium hysterophorus</i> |
| Pigweed                    | <i>Amaranthus retrofractus</i>  |
| Russian thistle            | <i>Salsola kali</i>             |
| Shepherdspurse             | <i>Capsella bursa-pastoris</i>  |
| Sp. thistle (annual)       | <i>Sonchus oleraceus</i>        |
| Sunflower                  | <i>Helianthus annuus</i>        |
| Thistle (Jim Hill) mustard | <i>Sisymbrium altissimum</i>    |
| Velvetleaf                 | <i>Abition theophrasti</i>      |
| Wild buckwheat             | <i>Polygonum convolvulus</i>    |
| Wild radish                | <i>Raphanus raphanistrum</i>    |

**Susceptible**  
**Use 1 1/2 pints BROMINAL PLUS per Acre**

- |                            |                                |
|----------------------------|--------------------------------|
| Blue (purple) mustard      | <i>Chorispora tenella</i>      |
| Corn chamomile             | <i>Anthemis arvensis</i>       |
| Corn groundsel             | <i>Lactuca scariola</i>        |
| Dog fennel (May weed)      | <i>Anthriscus vulgare</i>      |
| Redroot                    | <i>Amaranthus retrofractus</i> |
| Smartweed                  | <i>Polygonum sp.</i>           |
| Shawnee (German moss)      | <i>Stellaria media</i>         |
| Winter lettuce             | <i>Lactuca scariola</i>        |
| Peppercorn                 | <i>Chenopodium album</i>       |
| Prickly (Chinese) lettuce  | <i>Lactuca scariola</i>        |
| Sp. weed                   | <i>Polygonum sp.</i>           |
| Red meadow rocket          | <i>Diplotaxis erucoides</i>    |
| Silver leaf nightshade     | <i>Solanum elaeagnifolium</i>  |
| Small seeded sp. weed      | <i>Polygonum sp.</i>           |
| Smartweed (annual)         | <i>Polygonum sp.</i>           |
| Southern giant owl mustard | <i>Barbarea vulgaris</i>       |
| Tansy mustard              | <i>Thlaspi arvense</i>         |
| Tansy buckwheat            | <i>Polygonum sp.</i>           |
| Tarweed                    | <i>Polygonum sp.</i>           |
| Wild mustard               | <i>Barbarea vulgaris</i>       |
| Winter witch               | <i>Thlaspi arvense</i>         |
| Yellow rocket              | <i>Barbarea vulgaris</i>       |

**Less Susceptible**  
**Use 2 pints BROMINAL PLUS per Acre**

- |           |                                   |
|-----------|-----------------------------------|
| Bumby     | <i>Fumaria officinalis</i>        |
| Groundsel | <i>Senecio vulgaris</i>           |
| Ranunc    | <i>Lithospermum erythrorhizon</i> |

This treatment will not control established perennial broadleaf weeds such as Canada thistle, bindweed, or horsetail rush.

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**WARNING**

Harmful if swallowed. Avoid contact with skin, eyes or clothing. In case of contact, flush eyes with plenty of water, get medical attention. Wash skin with plenty of water and soap. Avoid breathing spray mist.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish and wildlife. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of waste. Do not apply when weather conditions favor drift from areas treated.

Avoid spray drift onto neighboring crops or pastures. Clean sprayer thoroughly before using for other purposes.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

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.

**DO NOT STORE BELOW 50°F.**

**CONTAINER DISPOSAL**

Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants (a) that the product conforms to the chemical description on the label (b) that the product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions and (c) that the directions, warnings and other statements on the label are based upon reports by experts and upon the results of reasonable tests of effectiveness of toxicity to laboratory animals and to plants and of residue and other reports of the type which have not been made on all values or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES EXPRESS OR IMPLIED AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This warranty does not extend to, and the Buyer shall be solely responsible for, any and all loss or damage which results from the use of this product (a) in any manner which is inconsistent with the label directions, warnings or cautions.

**BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED ON CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED AT THE MANUFACTURER'S OPTION TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED IF NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.**

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**GENERAL INFORMATION**

BROMINAL PLUS broadleaf herbicide applied as directed kills young broadleaf weeds in wheat and barley, thus reducing competition with these crops during their early growth.

BROMINAL PLUS broadleaf herbicide should be applied in the winter or early spring depending on the area. BROMINAL PLUS is not registered for applications to small grains undersown with legumes.

The most important factors for effective weed control are:

1. Spray while weeds are small.
2. Uniform spray coverage.
3. Use the recommended rate.

**DIRECTIONS FOR CROP USE—WHEAT, BARLEY, OATS, RYE**

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

BROMINAL PLUS broadleaf herbicide should be applied in late winter or early spring before broadleaf weeds have more than four true leaves. Treat after small grains have three to four leaves or are tillering. Earlier applications may affect crop vigor during poor growing weather. If severe winter damage has occurred, apply only after surviving plants have become re-established with new roots and leaves.

Most weeds should be treated before the four leaf stage. Weeds forming rosettes such as mustards, penny-cress, tarweed, groundwell and fiddleneck should be treated when rosettes are less than 2 inches across.

Proper timing, rate of application, and spray volume will vary according to the weeds present. Good coverage is essential for maximum weed control. Use 10 or more gallons of water per acre with ground sprayers. Nozzle pressure should be at least 30 psi. Width of swath must not exceed length of boom.

Do not apply to small grains during or after the boot stage.

Do not apply when the crop is under stress for lack of water, or when crop forms a canopy over weeds.

Do not graze treated fields for 30 days after application.

Vapors from this product may injure susceptible plants in the immediate vicinity.

**AMOUNTS TO USE - WHEN TO SPRAY**

Area	Amount/A	Weeds & Growth Stage	Amount Water Needed/A
WASHINGTON, OREGON, IDAHO, Western Montana winter or early spring application; grain 3-4 leaf stage or tillering	1 1/2 pints BROMINAL PLUS	groundwell, tarweed, fiddleneck, mustards, & other broadleaf weeds. Apply before 4 leaf stage & before rosette-forming weeds are more than 2 inches across.	Use 10 to 20 gallons/A with ground application. For best results, use 5-10 gallons/A with air application. Use higher volumes for larger weeds or where weed growth is slow due to dry or cold weather.
WASHINGTON, OREGON, IDAHO, where annual winter fall exceeds 26 inches or winter wheat and winter barley. Apply a single application in the fall after wheat has emerged but before soil freezes or in the spring as soon as soil thaws.	1 qt BROMINAL PLUS + 1/2 lb/A Karoxen ©	Herbst, groundwell, fiddleneck, other weeds. Apply before weeds are 2 inches tall or across.	Use a minimum of 25 gal with ground or 5-10 gal with air application for thorough coverage of weed foliage.  Read and observe all applicable precautions and restrictions on the BROMINAL PLUS and Karoxen labels before applying this tank mixture.
MONTANA, NORTH & SOUTH DAKOTA, MINNESOTA, COLORADO spring application; grain 3-4 leaf stage or tillering	1 pint BROMINAL PLUS	Russian thistle and pennycress mixed with wild buckwheat and/or cow cockle. Apply before 4-leaf stage. Where wild buckwheat and/or cow cockle are the principal weeds, SPECIAL alone may be used. See BROMINAL broadleaf herbicide label for directions. Weeds listed above applied after 4 leaf stage but before 6 inches high.	Use 10 to 20 gallons with ground or 2 to 5 gallons with air application.  Use the higher spray volume indicated above on larger weeds.
OTHER AREAS spring application; after tillering	1 1/2 pints BROMINAL PLUS	annual broadleaf weeds as listed	Use 10 to 20 gallons/A with ground application. For best results, use 5-10 gallons/A with air application.

BROMINAL PLUS broadleaf herbicide may be applied in liquid fertilizer or in combinations of liquid fertilizer and water. Use continual agitation until the mixture is completely applied. Do not allow mixture to stand overnight. NOTE: Herbicides can increase contact burn of fertilizers on plant foliage. A reduction in the fertilizer rate and concentration will reduce the hazard of leaf burn.

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