



**HERBICIDE**

BROMOXYNIL	GROUP	6	HERBICIDE
2,4-D	GROUP	4	HERBICIDE



**WILBUR-ELLIS®**

Ideas to Grow With™

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TO OPEN →

# DEADBOLT® BROADLEAF HERBICIDE

FOR CONTROL OF CERTAIN BROADLEAF WEEDS IN CEREAL GRAINS (WHEAT, BARLEY, OATS, RYE AND TRITICALE), SORGHUM (MILO), CORN (FIELD CORN, AND POPCORN), FALLOWLAND, AND CONSERVATION RESERVE (CRP) ACRES.

**ACTIVE INGREDIENTS:**

Octanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile) .....	17.88%
Heptanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile) .....	17.30%
2,4-D 2-ethylhexyl ester** .....	46.37%
<b>OTHER INGREDIENTS:</b> .....	18.45%
<b>TOTAL:</b> .....	100.00%

Contains xylene range/petroleum distillates

\* Equivalent to approximately 2.5 pounds of bromoxynil per gallon

\*\* Equivalent to approximately 3.125 pounds 2,4-D per gallon

EPA REG. NO. 71368-93-2935

EPA EST. NO. 228-IL-001

## KEEP OUT OF REACH OF CHILDREN **WARNING / AVISO**

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

**SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS**

DISTRIBUTED BY: **WILBUR-ELLIS COMPANY LLC** • P.O. BOX 16458 • FRESNO, CA 93755  
F-120518

# NET CONTENTS: 2.5 GAL. (9.46 Liters)

## KEEP OUT OF REACH OF CHILDREN

# WARNING / AVISO

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For Chemical Spill, Leak, Fire, or Exposure,  
Call CHEMTREC (800) 424-9300

For Medical Emergencies Only, Call (877) 325-1840

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING / AVISO

May be fatal if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (except for pilots), made of barrier laminate, butyl rubber > 14 mils, nitrile rubber > 14 mils or viton.
- Shoes plus socks
- Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate

See engineering controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### Engineering Control Statement:

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

## USER SAFETY RECOMMENDATIONS

#### Users Should:

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

## FIRST AID

<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

**HOT LINE NUMBER** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

## ENVIRONMENTAL HAZARDS

This pesticide may be toxic to wildlife, fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This product has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

**NOTICE:** This product contains low volatile 2-ethylhexyl ester. At high air or ground surface temperatures, vapors from this product may cause injury to susceptible plants. This fact should be considered when applying this product.

## 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.

Read the entire label before using the product. Use strictly in accordance with label precautionary statements and directions.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**APPLICATION BY CHEMIGATION** must be done by fixed pipe, overhead sprinkler systems or hand moved pipe. If hand moved pipe is used for chemigation, the pipe must not be handled in any way until 24 hours after chemigation has been completed and residues have been flushed from the system. When applying by chemigation, no person may enter the application site unless in an enclosed vehicle.

**AERIAL APPLICATION:** Aerial application is prohibited within 300 feet of residential areas (e.g., homes, schools, playgrounds, shopping areas, hospitals, etc.).

Do not apply with backpack or hand-held application equipment.

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et al., v. EPA C01-0143C (W.D. WA). For further information, please refer to [www.epa.gov/espp](http://www.epa.gov/espp).

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statement of this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to users of this product that are covered by the WPS. Do not enter or allow worker entry into treated areas during the REI of 24 hours.

Exception: If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant footwear plus socks and chemical-resistant gloves made of any water-proof material, and protective eyewear.

### PRODUCT INFORMATION

This product is formulated as an emulsifiable concentrate of octanoic acid and heptanoic acid esters of bromoxynil containing the equivalent of 2.5 pounds of bromoxynil per gallon and the 2-ethylhexylester of 2,4-D containing 3.125 pounds per gallon of 2,4-D.

This product is a postemergence herbicide for control of important broadleaf weeds infesting Cereal Grains (Wheat, Barley, Oats Rye, and

Triticale), Sorghum (Milo), Corn (Field Corn and Popcorn), Fallowland and Conservation Reserve Program (CRP) Acres. Optimum weed control is obtained when this product is applied to actively growing weed seedlings. This product is a contact and systemic herbicide; therefore, thorough coverage of the weed seedlings is essential for optimum control.

This product has little residual activity. Therefore, subsequent flushes of weeds will not be controlled by the initial treatment. Generally, crops that form a good canopy will help shade subsequent weed flushes.

Occasional transitory leaf burn may occur. The temporary leaf burn is similar to that seen with liquid fertilizer. Because the activity of this product is mainly contact, recovery of the crop is generally rapid with no lasting effect. Frequency and amount of leaf burn may be greater when crops are stressed by abrasive winds, cool to cold evening temperatures or mechanical injury, such as that caused by hail, sleet or insect feeding. To reduce the potential for temporary leaf burn, applications should be made to dry foliage in the recommended spray volumes per acre when weather conditions are not extreme.

### MIXING, LOADING AND HANDLING INSTRUCTIONS

#### 2.5 Gallon Containers

It is strongly recommended that special care be taken in mixing and loading this product. Hands should be placed on the container in such a way as to avoid possible drip or splash. Correct procedures for mixing and loading can be obtained from Wilbur-Ellis Company.

#### Bulk Containers

If you will handle a total of 48 gallons or more of this product per day, you must use a mechanical transfer system for all mixing and loading operations. If this product is packaged in a 30 gallon or larger container, you must use a mechanical transfer system which terminates in a drip-free hard coupling which may be used only with a spray or mix tank which has been fitted with a compatible coupling. If you do not presently own or have access to a mechanical transfer system with this type of coupling, contact your dealer for information on how to obtain such a system or to modify your present system. When using a mechanical transfer system, do not remove or disconnect the pump or probe from the container until the container has been emptied and rinsed. The pump or probe system must be used to rinse the empty container and to transfer the rinsate directly to the mixing or spray tank.

This product alone: Fill the spray tank 1/2 to 3/4 full with clean water. Begin agitation and add the recommended amount of this product. Add water to the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application.

#### TANK MIXES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

IMPORTANT: PESTICIDE TANK MIXES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. TO THE EXTENT ALLOWED BY APPLICABLE LAW, ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A TANK MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.

## COMPATIBILITY

Before full-scale mixing of this product with other pesticides, fertilizers, secondary plant nutrients, adjuvants, surfactants or oils, it is advisable to determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent.

**IMPORTANT: MIXING WITH OTHER SUBSTANCES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. TO THE EXTENT ALLOWED BY APPLICABLE LAW, ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.**

## SPRAYABLE LIQUID FERTILIZERS AND SPRAY ADDITIVES

This product can be applied in combination with sprayable liquid fertilizer or spray additives such as surfactants (including but not limited to the following Wilbur-Ellis surfactants: EDT Concentrate and IN-PLACE®) or crop oil concentrate. When tank mixing with liquid fertilizer, always add the fertilizer to the spray tank first and agitate thoroughly before adding this product. Always predetermine the compatibility with liquid fertilizer by mixing small proportional quantities in advance. Agitation must be maintained during filling and application operations to ensure that this product is evenly mixed with the fertilizer. Leaf burn may occur when this product is applied with liquid fertilizer, but new leaves are not adversely affected.

**NOTICE:** Fertilizers and spray additives can increase foliage leaf burn when applied with this product. Do not apply fertilizers or spray additives with this product if leaf burn is a major concern due to environmental conditions, crop or variety sensitivity to this product. If this product is mixed with liquid fertilizer, the fertilizer should compose no more than 1/2 the total spray mix.

## APPLICATION PROCEDURES

This product can be applied to registered use areas by ground, aerial and sprinkler irrigation equipment.

## GROUND APPLICATION

Select a spray volume and delivery system that will ensure thorough and uniform spray coverage. For optimum spray distribution and thorough coverage use of flat fan nozzles spaced no more than 20 inches on the boom with a spray pressure of 40 to 50 psi are recommended. Nozzle types, nozzle spacing and lower spray pressures that produce coarse spray droplets may not provide adequate coverage of the weeds to ensure optimum control. Raindrop® nozzles and flood nozzles are not recommended as weed control with this product may be reduced. A spray volume of 10 to 20 gallons per acre (GPA) is recommended for optimum spray coverage. A maximum ground speed of 10 mph is suggested. Ground applications made when dry dusty field conditions exist may provide reduced weed control in wheel track areas. Applications using less than 10 gallons per acre may result in reduced weed control.

When weed infestations are heavy, use of higher spray volumes will be helpful in obtaining uniform weed coverage. If you are unsure of the infestation level or size of crop, consult your local agronomist or extension service.

Do not apply when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement.

## AERIAL APPLICATION

Use orifice discs, cores and nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage. A minimum spray volume of 5 GPA and a maximum pressure of 40 psi are recommended. A minimum spray volume of 3 gallons per acre may be used if crop canopy and weed density allow adequate spray coverage. Aerial applications using less than 5 gallons of spray volume per acre may result in reduced weed control.

Do not apply during inversion conditions, when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement. Off target spray movement can be minimized by increasing the spray volume per acre and not applying when winds exceed 10 mph.

## SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, air blast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

### Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for non target species, non target crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

### Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

### Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

#### *Additional requirements for aerial applications:*

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

#### *Additional requirements for ground boom application:*

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

*Additional requirements for liquid products applied as a spray and containing an ester form of 2,4-D (e.g. 2,4-D butoxyethyl ester, 2,4-D ethylhexyl ester, 2,4-D isopropyl ester):*

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

### SPRINKLER IRRIGATION APPLICATION

This product can be applied through sprinkler irrigation systems to Cereal Grains (Wheat, Barley, Oats, Rye and Triticale), Sorghum (Milo), and Corn (Field Corn and Popcorn).

Apply this product through sprinkler systems including center pivot, lateral move, side (wheel) roll, solid set or hand move irrigation systems only. If hand moved pipe is used for chemigation, the pipe must not be handled in any way until 24 hours after chemigation has been completed and residues have been flushed from the system. When applying by chemigation, no person may enter the application site unless in an enclosed vehicle. Do not apply this product through any other type of irrigation system.

### SPECIFIC REQUIREMENTS FOR APPLICATION THROUGH AUTOMATED SPRINKLER IRRIGATION SYSTEM

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Agitation is recommended in the pesticide supply tank when applying this product.
9. This product should be applied continuously for the duration of the water application with center pivot and continuous lateral move systems. Application of this product should be made during the last 30 to 45 minutes of the irrigation set with other overhead sprinkler systems.
10. For best performance, set the sprinkler system to deliver approximately 0.5 inch or less of water per acre.
11. Remove scale, pesticide residues and other foreign matter from the supply tank and entire injector system. Flush with clean water.
12. If this product is diluted in the supply tank, fill the tank with half of the water amount desired, add this product and then add remaining water amount with agitation. Always dilute with at least 4 parts water to 1 part of this product.
13. Start the sprinklers and then inject this product into the irrigation line. This product should be injected with a positive displacement pump into the main line at least 8 feet ahead of a right angle turn to insure adequate mixing. Refer to this product label for detailed information on application rates and timings.

### CHEMIGATION USE RESTRICTIONS

- Do not apply when conditions favor drift, when system connections or fittings leak, or when nozzles do not provide uniform distribution.
- Do not connect an irrigation system used for pesticide application to a public water system.

### CHEMIGATION USE PRECAUTIONS

- Application of more than 0.5 inch/acre of irrigation water may result in decreased product performance on certain soils.
- Allow sufficient time for pesticide to be flushed through all the lines and nozzles before turning off irrigation water.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- A person knowledgeable of the chemigation system and responsible for its operations, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## WEED RESISTANCE MANAGEMENT

For resistance management, please note that Deadbolt Broadleaf Herbicide contains both a Group 6 / Bromoxynil and a Group 4 / 2,4-D herbicide. Any weed population may contain or develop plants naturally resistant to Deadbolt Broadleaf Herbicide and other Group 4 herbicides and Group 6 herbicide. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of Deadbolt Broadleaf Herbicide or other Group 6 herbicides and Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g. higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. Do not assume that each listed weed is being controlled by this mechanism of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredient in this product.

Suspected herbicide-resistant weeds may be identified by these indicators:

- \* Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- \* A spreading patch of non-controlled plants of a particular weed species; and
- \* Surviving plants mixed with controlled individuals of the same species.

## INTEGRATED PEST MANAGEMENT

Wilbur-Ellis recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

## WEEDS CONTROLLED

Postemergence application of this product will control the following weeds when sprayed in the seedling stage (generally less than 8 in. height). Use the higher dose of recommended rate ranges to control larger weeds (over 4 in. in height) or weeds listed as susceptible in the following table:

### MOST SUSCEPTIBLE BROADLEAF WEED SPECIES

Annual sowthistle	( <i>Sonchus oleraceus</i> )
Black mustard	( <i>Brassica nigra</i> )
Black nightshade	( <i>Solanum nigrum</i> )
Common cocklebur	( <i>Xanthium strumarium</i> )
Common lambsquarters	( <i>Chenopodium album</i> )
Common tarweed	( <i>Hemizonia congesta</i> )
Cow cockle	( <i>Saponaria vaccaria</i> )
Cutleaf nightshade	( <i>Solanum triflorum</i> )
Eastern black nightshade	( <i>Solanum ptycanthum</i> )
Coast fiddleneck	( <i>Amsinckia intermedia</i> )
Field pennycress	( <i>Thlaspi arvense</i> )
Green smartweed	( <i>Polygonum scabrum</i> )
Hairy nightshade	( <i>Solanum sarachoides</i> )
Horned Poppy	( <i>Glaucium comiculatum</i> )
Jimsonweed	( <i>Datura stramonium</i> )
Ladysthumb	( <i>Polygonum persicaria</i> )
Lanceleaf sage	( <i>Salvia reflexa</i> )
London rocket	( <i>Sisymbrium irio</i> )
Marshelder	( <i>Iva xanthifolia</i> )
Pennsylvania smartweed	( <i>Polygonum strumarium</i> )
Pepperweed spp.	( <i>Lepidium</i> spp.)
Redroot pigweed	( <i>Amaranthus retroflexus</i> )
Russian thistle	( <i>Salsola kali</i> )
Shepherdspurse	( <i>Capsella bursa-pastoris</i> )
Silverleaf nightshade	( <i>Solanum elaeagnifolium</i> )
Sunflower <sup>1</sup>	( <i>Helianthus annuus</i> )
Tall Waterhemp	( <i>Amaranthus tuberculatus</i> )
Tartary buckwheat	( <i>Fagopyrum tataricum</i> )
Tumble mustard	( <i>Sisymbrium altissimum</i> )
Wild buckwheat	( <i>Polygonum convolvulus</i> )
Wild mustard	( <i>Sinapis arvensis</i> )
Yellow rocket	( <i>Barbarea vulgaris</i> )

### SUSCEPTIBLE BROADLEAF WEED SPECIES

Alfalfa	( <i>Medicago sativa</i> )
Annual Smartweed	( <i>Polygonum pensylvanicum</i> )
Arrowhead	( <i>Sagittaria latifolia</i> )
Bitterweed	( <i>Helenium amarum</i> )
Blue (purple) mustard	( <i>Chlorispora tenella</i> )
Broomweed	( <i>Malvastrum cormandelianum</i> )
Buffalobur	( <i>Solanum rostratum</i> )
Burcucumber	( <i>Sisyo angulatus</i> )
Canada thistle	( <i>Cirsium arvense</i> )
Canola	( <i>Brassica napus</i> )
Common groundsel	( <i>Senecio vulgaris</i> )
Common ragweed	( <i>Ambrosia artemisiifolia</i> )
Corn chamomile	( <i>Anthemis arvensis</i> )
Corn gromwell	( <i>Lithospermum arvense</i> )
Croton	( <i>Codiaeum variegatum</i> )
Devils claw	( <i>Harpagophytum procumbens</i> )
Docks	( <i>Rumex</i> spp.)
Dogbane	( <i>Apocynum cannabinum</i> )
Field bindweed	( <i>Convolvulus arvensis</i> )
Frenchweed	( <i>Thlaspi arvense</i> )
Fumitory	( <i>Fumaria officinalis</i> )
Giant ragweed	( <i>Ambrosia trifida</i> )
Gumweed	( <i>Grindelia squarrosa</i> )
Hemp sesbania	( <i>Sesbania exaltata</i> )
Henbit	( <i>Lamium amplexicaule</i> )
Ivyleaf morningglory	( <i>Ipomoea hederacea</i> )
Knawel	( <i>Scleranthus annuus</i> )
Kochia	( <i>Kochia scoparia</i> )
Mayweed	( <i>Anthemis cotula</i> )
Musk thistle	( <i>Carduus nutans</i> )
Nettle	( <i>Urtica</i> spp.)
Plantain	( <i>Plantago major</i> )
Prostrate knotweed	( <i>Polygonum aviculare</i> )
Puncture vine	( <i>Tribulus terrestris</i> )
Redroot pigweed	( <i>Amaranthus retroflexus</i> )
Smooth pigweed	( <i>Amaranthus hybridus</i> )
Southern wild rose	( <i>Rosa acicularis</i> )
Spiny pigweed	( <i>Amaranthus spinosus</i> )
Tall morningglory	( <i>Ipomoea putpurea</i> )
Tall waterhemp	( <i>Amaranthus tuberculatus</i> )
Tansy mustard	( <i>Descurainia pinnata</i> )
Tansy ragwort	( <i>Senecio jacobaea</i> )
Tarweed	( <i>Hemizonia</i> spp.)
Velvetleaf	( <i>Abutilon theophrasti</i> )
Venice mallow	( <i>Hibiscus trionum</i> )
Wild garlic	( <i>Allium vineale</i> )
Wild onion	( <i>Allium stellatum</i> )
Wild radish	( <i>Raphanus raphanistrum</i> )

<sup>1</sup>For control of sunflower, delay application until first sunflower seedlings emerging are 4 inches in height. Weeds germinating after spraying will not be controlled.



## CALIFORNIA REGISTRATIONS

Only the following uses referenced in this label are registered for use in California: cereal grains (wheat, barley, oats, rye and triticale), corn (post emergence application only), sorghum (post emergence application only); chemigation in small grains; 2,4-D and MCPA tank mixtures in small grains; 2,4-D and atrazine tank mixtures in corn and sorghum. All applications must be made with a minimum spray volume of 10 GPA by ground or 5 GPA by air equipment.

### CORN FIELD CORN AND POPCORN

APPLICATION TIMING AND SPECIFIC COMMENTS				
PRODUCT	APPLICATION	RATE pints/acre (ounce/acre)	CROP	WEEDS AND INSTRUCTIONS
Deadbolt	Preplant	0.8 – 1.6 (12.8 – 25.6)	To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 7 to 14 days before planting.	Use high rate for control of less susceptible weeds or cover crops such as alfalfa.
Deadbolt	Preemergence	0.8 – 1.2 (12.8 – 19.2)	Plant corn as deep as practical.	Apply product to emerged weeds from 3 to 5 days after planting but before corn emerges. Product will not control weeds which have not emerged.
Deadbolt	Emergent	0.6 (9.6)	Apply to corn after emergence to the 3-leaf stage but prior to tassel emergence.	Apply in 5 to 30 gallons of water per acre ground application, 1 to 5 gallons of water by air.
Deadbolt	Postemergence Average Condition	0.6 (9.6)	Apply to field corn after emergence but prior to tassel emergence. Use drop nozzles if crop is taller than 8 inches.	Best results are usually obtained when weeds are small and corn is 4 to 12 inches tall. For Canada thistle burndown and Field bindweed suppression up to the mid-bloom stage, use the higher rate. If corn is growing rapidly and temperature and soil moisture is high, use 0.4 pint per acre to reduce possibility of crop damage.
	Dry Condition*	0.9 (14.4)	Apply to field corn between the 4-leaf stage + but prior to tassel emergence. Use drop nozzles if crop is taller than 8 inches.	Application rates of up to 1.25 pint per acre may be used to control some hard-to-control weeds. However, the possibility of injury to the corn is increased.
Deadbolt + Atrazine**	Postemergence Average Conditions	0.6 (9.6) + 1/2 to 1-1/5 lb ai/A	Apply to field corn after emergence but before the corn is 12 inches tall. As soon as corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage as much as possible; direct spray over tops of weeds but not over the corn.	Best results are usually obtained when weeds are small and corn is 4 to 12 inches tall. For improved devils claw and field bindweed suppression use the higher rate. If corn is growing rapidly and temperature and soil moisture is high, use 0.4 pint per acre to reduce possibility of crop damage.
	Dry Conditions*	0.9 (14.4) + 1/2 to 1-1/5 lb ai/A	Apply to field corn between the 4-leaf stage but before the corn is 12 inches tall. As soon as corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage as much as possible; direct spray over tops of weeds but not over the corn.	Application rates of up to 1.25 pint per acre may be used to control some hard-to-control weeds. However, the possibility of injury to the corn is increased.

**DIRECTIONS FOR CORN:** Seed corn producers should consult the respective seed corn company regarding tolerance of certain seed production inbred lines to this product. Addition of a spray additive or mixture with liquid fertilizers may cause excessive crop leafburn. Postemergence application prior to the 3-leaf growth stage of corn may result in increased crop leaf burn. Tank mixtures with nonionic surfactant, oil concentrate, nitrogen fertilizer solution or other adjuvants may result in increased initial crop leaf burn. Special care should be taken when using this product and Banvel®, Clarity®, Clash®, Diablo®, or 2,4-D tank mixtures to avoid off target drift to sensitive crops. Tank mixtures with 2,4-D, Banvel, Clarity or Diablo can cause stalk brittleness to field corn. Winds or cultivation may cause breakage while crop is brittle.

\* For Western States – Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming

#### \*\* ATRAZINE TANK MIX RESTRICTIONS

Atrazine is a Restricted Use Herbicide due to groundwater concerns, users must read and follow all precautionary statements and instructions on the atrazine label in order to minimize the potential for atrazine to reach groundwater. For postemergent applications with Atrazine, do not use nonionic surfactant or crop oil concentrate with this product.



**RESTRICTIONS FOR USE ON CORN (FIELD CORN, SWEET CORN AND POPCORN):**

- Do not cut crop for feed, fodder or graze within 45 days of application.
- Do not plant rotational crops within 30 days following product application.
- The preharvest interval (PHI) is 7 days.
- Do not cultivate for 2 weeks after treatment while corn is brittle.
- Do not apply this product to postemergence to seed corn inbreds or popcorn prior to the 3-leaf stage of crop growth as excessive crop leaf burn may occur.
- Do not exceed 1.6 pints of this product (0.5 lb/A bromoxynil).
- Do not apply the this product + Pursuit® tank mix except to field corn hybrids known to possess resistance to Pursuit, or severe crop injury may result.
- Do not use this product on Sweet Corn.

**RESTRICTIONS - Preplant or Preemergence:**

- Limited to one preplant or preemergence application per crop cycle.
- Do not apply more than 1.0 lbs 2,4-D per acre per year.
- Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth.

**RESTRICTIONS - Emergent:**

- Limited to one postemergence application per crop cycle.
- Do not apply more than 0.5 lbs 2,4-D per acre per year.

**RESTRICTIONS - Postemergence:**

- Limited to one postemergence application per crop cycle.
- Do not apply more than 0.5 lbs 2,4-D per acre per year.
- Do not apply from tasseling to dough stage.

**RESTRICTIONS - Preharvest:**

- Do not use on sweet corn.
- Limited to one preharvest application per crop cycle.
- Do not apply more than 1.5 lbs 2,4-D per acre per year.

**SORGHUM****APPLICATION TIMING AND SPECIFIC COMMENTS**

PRODUCT	RATE pints/acre (ounce/acre)	CROP	WEEDS
Deadbolt	0.75 (12)	Apply to sorghum between the 3-leaf stage but prior to the preboot stage (growth stage 4) or 15 inches in height, whichever comes first. Use drop nozzles if crop is taller than 8 inches.	For Canada thistle burndown and field bindweed suppression up to the mid-bloom stage, tank mix an additional use 1/16 to 1/8 lb. ai/A of 2,4-D with Deadbolt.
	1.1 (18)	Apply to sorghum between the 4-leaf stage but prior to the preboot stage (growth stage 4) or 15 inches in height, whichever comes first. Use drop nozzles if crop is taller than 8 inches.	
Deadbolt + Atrazine**	0.75 (12) +	Apply to sorghum between the 3-leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by Deadbolt + atrazine tank mixtures at listed rates of application plus improved devils claw control For Canada thistle burndown and field bindweed suppression, use 1/16 to 1/8 lb ai/A of 2,4-D with Deadbolt.
	1/2 to 1-1/5 lb ai/A		
	1.1 (18) +		
	1/2 to 1-1/5 lb ai/A	Apply to sorghum between the 4-leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first. Use drop nozzles if crop is taller than 8 inches.	

**DIRECTIONS FOR SORGHUM (GRAIN AND FORAGE):** Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures. Heavy weed populations require a higher rate and complete spray coverage. Apply with enough spray volume to provide uniform coverage of weeds, usually 10 to 20 gallons per acre by ground equipment and 5 gallons by aircraft. Refer to labels of products used in tank mixture for additional restrictions and precautions. See **TANK MIXTURE DIRECTIONS** section for additional information.

**\*\* ATRAZINE TANK MIX RESTRICTIONS**

Atrazine is a Restricted Use Herbicide due to groundwater concerns; users must read and follow all precautionary statements and instructions on the atrazine label in order to minimize the potential for atrazine to reach groundwater. For postemergent applications with Atrazine, do not use nonionic surfactant or crop oil concentrate with this product.

**RESTRICTION FOR USE ON SORGHUM (GRAIN AND FORAGE):**

- Do not graze treated fields within 45 days after application of this product.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor control will result.
- Apply to sorghum between the 3-leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first.
- Do not plant rotational crops within 30 days following application of this product.
- The preharvest interval (PHI) is 7 days.
- Do not make more than one preharvest application per crop cycle.
- The total cumulative rate must not exceed 0.5 lbs ai. bromoxynil (25.6 oz [1.6 pints] of this product) per acre per year.
- The total cumulative rate must not exceed 2 lbs. ai. of 2,4-D per acre per year.

**PRECAUTIONS FOR USE ON SORGHUM (GRAIN AND FORAGE):**

- Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. Do not use if the potential for crop injury is not acceptable.
- The higher rates (greater than 12 ounces per acre) increase the risk of sorghum injury and should be used only where the weed control problem justifies the potential risk of crop damage.

## CEREAL GRAINS WHEAT, BARLEY, RYE AND TRITICALE

APPLICATION TIMING AND SPECIFIC COMMENTS			
PRODUCT	RATE pints/acre (ounce/acre)	CROP	WEEDS
Deadbolt	0.8 (12.8)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	MOST SUSCEPTIBLE BROADLEAF WEEDS: Apply to weeds up to the 8 leaf stage or 4 inches in height, whichever comes first. If weeds forms rosette, apply before weeds exceeds 2 inches in diameter.
	1.0 – 1.25 (16 – 20)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	SUSCEPTIBLE BROADLEAF WEEDS: Apply to weeds up to the 4 leaf stage or 2 inches in height, whichever comes first. If weeds forms rosette, apply before weeds exceeds 1 inches in diameter.
	1.25 (20)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	Apply to henbit, knawel and mayweeds up to 4 leaf stage or 2 inches in height, whichever comes first. Apply to kochia and tansy mustard for improved control when these weeds exceed the recommended stage of growth under cool dry conditions.
	Chemigation Only 1.25 (20)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.  Apply through automated sprinkler systems with mechanical transfer loading system only. See <b>APPLICATION BY CHEMIGATION &amp; SPRINKLER IRRIGATION APPLICATION</b> Sections for details.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE broadleaf weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

DIRECTIONS FOR CEREAL GRAINS - WHEAT, BARLEY, RYE AND TRITICALE: Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures. Heavy weed populations require a higher rate and complete spray coverage. Apply with enough spray volume to provide uniform coverage of weeds, usually 10 to 20 gallons per acre by ground equipment and 5 gallons by aircraft. Refer to labels of products used in tank mixture for additional restrictions and precautions. See **TANK MIXTURE DIRECTIONS** section for additional information.

**RESTRICTION FOR USE ON CEREALS (WHEAT, BARLEY, RYE AND TRITICALE):**

- Do not graze treated fields within 45 days after application of this product.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor control will result.
- Apply to cereal grains that are well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0).

- Do not apply if the tip of the flag leaf is visible in the whorl.
- Refer to labels of products used in tank mixture for additional restrictions and precautions.
- Do not plant rotational crops within 30 days following application of this product.
- The preharvest interval (PHI) is 7 days.
- Do not make more than one preharvest application per crop cycle.
- The total cumulative rate must not exceed 0.5 lbs ai. bromoxynil (25.6 oz [1.6 pints] of this product) per acre per year.
- The total cumulative rate must not exceed 2 lbs. ai. of 2,4-D per acre per year.

**PRECAUTIONS FOR USE ON CEREALS (WHEAT, BARLEY, RYE AND TRITICALE):**

- Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. Do not use if the potential for crop injury is not acceptable.
- The higher rates (greater than 12.8 ounces per acre) increase the risk of cereal injury and should be used only where the weed control problem justifies the potential risk of grain damage.

**OATS**

APPLICATION TIMING AND SPECIFIC COMMENTS			
PRODUCT	RATE pints/acre (ounce/acre)	CROP	WEEDS
Deadbolt	<b>Spring Seeded Oats</b> 0.6 (9.6)	Apply to oats that are well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	Apply to weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
	<b>Fall Seeded Oats</b> 0.6 to 0.9 (9.6 to 14.4)		
	Chemigation Only 1.25 (20)	Apply to oats that are well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.  Apply through automated sprinkler systems with mechanical transfer loading system only. See <b>APPLICATION BY CHEMIGATION &amp; SPRINKLER IRRIGATION APPLICATION</b> Sections for details.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE broadleaf weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

**DIRECTIONS FOR OATS:** Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures. Heavy weed populations require a higher rate and complete spray coverage. Apply with enough spray volume to provide uniform coverage of weeds, usually 10 to 20 gallons per acre by ground equipment and 5 gallons by aircraft. Refer to labels of products used in tank mixture for additional restrictions and precautions. See **TANK MIXTURE DIRECTIONS** section for additional information.

**RESTRICTION FOR USE ON OATS:**

- Do not graze treated fields within 45 days after application of this product.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor control will result.
- Apply to cereal grains that are well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0).
- Do not apply if the tip of the flag leaf is visible in the whorl.
- Do not plant rotational crops within 30 days following application of this product.
- The preharvest interval (PHI) is 7 days.
- Do not make more than one preharvest application per crop cycle.
- The total cumulative rate must not exceed 0.5 lbs ai. bromoxynil (25.6 oz [1.6 pints] of this product) per acre per year.
- The total cumulative rate must not exceed 2 lbs. ai. of 2,4-D per acre per year.

**PRECAUTIONS FOR USE ON OATS:**

- Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. Do not use if the potential for crop injury is not acceptable.
- The higher rates (greater than 9.6 ounces per acre) increase the risk of cereal injury and should be used only where the weed control problem justifies the potential risk of grain damage.

## TANK MIXTURE DIRECTIONS

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE pints/acre (ounce/acre)	CROP	WEEDS
Deadbolt + Rhonox® (or other brands of MCPA ester herbicides registered for use as specified)	0.75 to 1.0 (12 to 16) + 4 to 8 fl oz /A	Apply to wheat, barley, triticale, oats and rye that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	For control of MOST SUSCEPTIBLE and SUSCEPTIBLE weeds as listed on this label and improved control of redroot pigweed and kochia. Apply to weeds up to the 8 leaf stage, 3 inches in height or 2 inches in diameter, whichever comes first. Apply to kochia and redroot pigweed up to 2 inches in height or diameter.
Deadbolt + Glean® (or other brands of chlorsulfuron herbicides registered for use as specified) + nonionic surfactant such as R-11	0.75 to 1.25 (12 to 20) + 1/6 to 1/3 oz /A + 1 to 2 qt/100 gal of water	Apply to wheat and barley that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the Glean label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, tansy mustard and chickweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Deadbolt + Finesse® (or other brands of chlorsulfuron plus metsulfuron-methyl herbicides registered for use as specified) + nonionic surfactant such as R-11	0.75 to 1.25 (12 to 20) + 1/6 to 1/3 oz /A + 1 to 2 qt/100 gal of water	Apply to wheat and barley that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the Finesse label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, tansy mustard and chickweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Deadbolt + Ally® or Purestand® (or other brands of metsulfuron-methyl herbicides registered for use as specified) + nonionic surfactant such as R-11	0.75 to 1.25 (12 to 20) + 1/10 oz /A + 1 to 2 qt/100 gal of water	Apply to wheat and barley that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the Ally or Purestand label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, tansy mustard and chickweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Deadbolt + Banvel or Diabolo (or other brands of dicamba dimethylamine salt herbicides registered for use as specified)	0.75 to 1.25 (12 to 20) + 2 to 4 oz /A	Apply to Fall seeded wheat that is well tillered (Feekes 3.0) but prior to the joint stage. Spring seeded wheat from the 3- to 5-leaf stage of growth.	This tank mix improves control of broadleaves such as prostrate knotweed and kochia. Apply to weeds up to the 8-leaf stage, 3 inches in height or 2 inches in diameter, whichever comes first. Apply to kochia up to 2 inches in height or diameter.

<p>Deadbolt + Harmony® Extra or Treaty® Extra (or other brands of tribenuron-methyl plus thifensulfuron methyl herbicides registered for use as specified) + nonionic surfactant such as R-11</p>	<p>0.75 to 1.25 (12 to 20) + 3/10 to 1/2 oz /A + 1 to 2 qt/100 gal of water</p>	<p>Apply to Winter wheat (including durum), barley and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the Harmony Extra or Treaty Extra label for crop rotation and restrictions. Apply to Spring wheat and barley that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the Harmony Extra or Treaty Extra label for crop rotation and restrictions.</p>	<p>This tank mix improves control of broadleaf weeds such as henbit, chickweed and redroot pigweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or across, whichever comes first.</p>
<p>Deadbolt + Amber® + nonionic surfactant such as R-11</p>	<p>0.75 to 1.25 (12 to 20) + 0.28 - 0.56 oz /A + 1 to 2 qt/100 gal of water</p>	<p>Apply to wheat and barley that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the Amber label for crop rotation and restrictions.</p>	<p>This tank mix improves control of broadleaves such as henbit, tansy mustard, and pigweed. Apply to weeds up to the 4-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.</p>
<p>Deadbolt + Express® or Victory® (or other brands of tribenuron-methyl herbicides registered for use as specified) + nonionic surfactant such as R-11</p>	<p>0.75 to 1.25 (12 to 20) + 1/6 to 1/3 oz /A + 1 to 2 qt/100 gal of water</p>	<p>Apply to wheat, barley and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the Express or Victory label for crop rotation and restrictions.</p>	<p>This tank mix improves control of Broadleaf weeds such as henbit, chickweed, redroot pigweed and suppression of Canada thistle. Apply to annual weeds up to the 8-leaf stage, 4 inches in height or across, whichever comes first and to Canada thistle 4 to 8 inches tall with 2 to 6 inches of new growth.</p>
<p>Deadbolt + Curtail M or Outback M (or other brands of clopyralid plus 2-ethylhexyl ester of MCPA herbicides registered for use as specified)</p>	<p>0.75 to 1.25 (12 to 20) + 32.0 fl oz /A</p>	<p>Apply to wheat and barley that is well tillered (Feekes 3.0) but prior to the joint stage.</p>	<p>This tank mix improves control of kochia, wild buckwheat and suppression of Canada thistle. Apply to annual broadleaf weeds up to the 8- leaf stage, 4 inches in height or 2 inches in diameter and to Canada thistle in the rosette to prebud stage.</p>
<p>Deadbolt + Sencor® or Lexone® Broadleaf Herbicide (or other brands of metribuzin herbicides registered for use as specified)</p>	<p>1.0 (16) + 1/8-3/16 lb ai</p>	<p>Apply to Winter wheat in Idaho, Oregon and Washington that is well tillered (Feekes 3.0) but prior to the joint stage.  Avoid application when crop has experienced winter kill, frost damage, disease or drought.</p>	<p>This tank mix improves control of broadleaf weeds such as chickweed, filigree, henbit. Apply to weeds up to the 4-leaf stage, 2 inches in height or diameter, whichever comes first. A recognized authority should be consulted concerning the use of this mixture in your area.</p>

## FALLOWLAND

Fallowland is idle land, postharvest to crops or between crops.

APPLICATION TIMING AND SPECIFIC COMMENTS			
PRODUCT	RATE pints/acre (ounce/acre)	TYPE OF WEED	DIRECTIONS
Deadbolt	1.2 to 2.5 (19 to 40)	Annual broadleaf weeds	Use the lower rate when weeds are small (2 to 3 inches tall) and actively growing. Use the higher rate on older and drought-stressed plants. Use a higher rate in the rate range when weeds are larger and under less favorable growth conditions.
Deadbolt	2.5 to 3.2 (40 to 51)	Biennial broadleaf weeds	Spray when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed.

**DIRECTIONS FOR FALLOWLAND:** Use 1.2 to 3.2 pints of this product in a recommended minimum of 10 gallons of water per acre for ground application and recommended minimum of 2 gallons for aerial application of water per acre on annual broadleaf weeds and up to 3.2 pints per acre on established perennial species such as Canada thistle and field bindweed.

Use lower rate when annual weeds are small (2" to 3" tall) and growing actively. Use the higher rate on older and drought-stressed plants. Spray musk thistles and other biennial species while in seedling to rosette stage, and before flower stalks are initiated. The lower rate can be used in spring during rosette stage. In fall or after flower stalks have developed, use highest rate. Spray perennial weed in bud to bloom stage, or in good vegetative growth.

If environmental and/or plant conditions in fallow are hot, dry, and dusty this product should not be used.

### RESTRICTION FOR USE ON FALLOWLANDS:

- Do not make more than two applications per year.
- Do not exceed 3.2 pints of this product (1.0 lb/A bromoxynil).
- Do not exceed 2.0 lbs ae 2,4-D per acre per year.
- Do not plant any crop for 3 months after treatment or until chemical has disappeared from soil.
- Minimum of 30 days between applications.
- (PHI) Do not cut, forage or hay within 7 days of application.
- Do not disturb treated area for at least 2 weeks after treatment or until weed tops are dead.

## CONSERVATION RESERVE PROGRAM (CRP) ACRES

APPLICATION TIMING AND SPECIFIC COMMENTS			
PRODUCT	RATE pints/acre (ounce/acre)	CROP	WEEDS
Deadbolt	0.8 to 1.6 (13 to 26)	Apply to grasses from the 6-leaf stage	Apply 0.8 pint per acre to MOST SUSCEPTIBLE and 1.2 to 1.6 pints per acre to SUSCEPTIBLE broadleaf weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.

**DIRECTIONS FOR GRASSES IN CONSERVATION RESERVE PROGRAM AREAS:** To control annual broadleaf weeds, apply when weeds are actively growing. Use 0.8 to 1.2 pint per acre when weeds are small; use higher rates on older weeds. Excessive injury may result if applied to young grasses with fewer than 6 leaves or prior to grasses being well established. To control biennial and perennial broadleaf weeds in established grasses, apply at a rate of 1.2 to 1.6 pints per acre. Apply to actively growing weeds. Treat when biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage. **NOTE:** Suggest at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground.

### RESTRICTION FOR USE ON CONSERVATION RESERVE PROGRAMS (CRP) ACRES:

- Do not allow livestock to graze in treated areas or feed treated grass to livestock.
- Do not apply if desirable legumes are included within the CRP area.
- Do not apply more than 1.6 pints product (0.5 lb. ae Bromoxynil) per acre per year.
- Do not exceed 2.0 lbs ae 2,4-D per acre per year.
- Do not apply more than 2 applications per year with a minimum retreatment interval of 21 days.
- Do not harvest or graze treated Conservation Reserve Program acres.
- Do not apply to grasses in the boot to dough stage if grass seed production is desired.

## STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

**PESTICIDE STORAGE:** Store at temperatures below 100°F. If allowed to freeze, remix before using.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. 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 HANDLING:**

**Nonrefillable Containers 5 Gallons or Less:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.



Conditions of Sale and Limitation of Warranty and Liability:

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using the product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

**ALL STATEMENTS MADE HEREIN ARE SUBJECT TO APPLICABLE LAW, AND TO THE EXTENT THERE IS ANY INCONSISTENCY OR CONTENTION, APPLICABLE LAW SHALL GOVERN.**

The Directions for Use of the product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of many different factors including, without limitation, manner of use or application, weather, combination with other products, or crop conditions. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Manufacturer and Seller harmless from any claims relating to such factors.

**Seller warrants that this product conforms to the chemical description on the label. EXCEPT FOR THIS WARRANTY, THE PRODUCT IS FURNISHED "AS-IS," AND NEITHER SELLER NOR MANUFACTURER MAKES ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SELECTION, PURCHASE OR USE OF THIS PRODUCT; SELLER AND MANUFACTURER SPECIFICALLY DISCLAIM ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE BEYOND WHAT IS STATED ON THE LABEL. Buyer and User accept all risks arising from any use of this product, including without limitation, uses contrary to label instructions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or Manufacturer.**

Neither Manufacturer nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE BUYER OR USER, AND THE EXCLUSIVE LIABILITY OF MANUFACTURER AND SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT, OR, AT THE ELECTION OF MANUFACTURER OR SELLER, THE REPLACEMENT OF THE PRODUCT.

These Conditions of Sale and Limitation of Warranty and Liability shall be interpreted, unless otherwise required by the law of the state of purchase, in accordance with the laws of the State of California, excluding its conflicts of laws rules, and may not be amended by any oral or written agreement.

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**HERBICIDE**



**WILBUR-ELLIS**  
Ideas to Grow With®

# DEADBOLT® BROADLEAF HERBICIDE

**FOR CONTROL OF CERTAIN BROADLEAF WEEDS IN CEREAL GRAINS (WHEAT, BARLEY, OATS, RYE AND TRITICALE), SORGHUM (MILO), CORN (FIELD CORN, AND POPCORN), FALLOWLAND, AND CONSERVATION RESERVE (CRP) ACRES.**

## ACTIVE INGREDIENTS:

Octanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile).....	17.88%
Heptanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile).....	17.30%
2,4-D 2-ethylhexyl ester**.....	46.37%

<b>OTHER INGREDIENTS:</b> .....	18.45%
<b>TOTAL:</b> .....	100.00%

Contains xylene range/petroleum distillates

\* Equivalent to approximately 2.5 pounds of bromoxynil per gallon

\*\* Equivalent to approximately 3.125 pounds 2,4-D per gallon

EPA REG. NO. 71368-93-2935

EPA EST. NO.228-IL-001

## KEEP OUT OF REACH OF CHILDREN WARNING / AVISO

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

**SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING / AVISO**

May be fatal if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID	
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

## FIRST AID (cont.)

### IF ON SKIN OR CLOTHING

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

**HOT LINE NUMBER:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

## ENVIRONMENTAL HAZARDS

This pesticide may be toxic to wildlife, fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This product has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

**NOTICE:** This product contains low volatile 2-ethylhexyl ester. At high air or ground surface temperatures, vapors from this product may cause injury to susceptible plants. This fact should be considered when applying this product.

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**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.  
For Medical Emergencies Only, Call (877) 325-1840**

**DISTRIBUTED BY: WILBUR-ELLIS COMPANY LLC  
P.O. BOX 16458 FRESNO, CA 93755**

**NET CONTENTS: 2.5Gal (9.46Liters)**

PULL HERE TO OPEN  
PRESS TO RESEAL

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