

PM 25 55947-1

1 of 60 File

United States Environmental Protection Agency
Washington, D.C. 20460

OCT 13 1993

Office of
Prevention, Pesticides and
Toxic Substances

Jonathan E. Bryant
SANDOZ AGRO, INC.
1300 EAST TOUHY AVENUE
DES PLAINES IL 60018

Subject: Label Amendment Submission of 06/10/93
in Compliance with WPS Labeling Requirements
EPA Reg No. 55947-1
BANVEL HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)

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Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

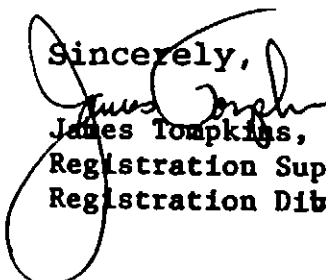
Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)
Room 266A Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,


James Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

20760

(Directions for Use)

BANVEL® HERBICIDE

For Weed Control in Corn, Sorghum, Small Grains, Pasture, Rangeland, Non-Cropland, Fallow, Sugarcane, Asparagus, Turf and Grass Seed Crops.

Active Ingredient:

Dimethylamine salt of dicamba

(3,6-dichloro-p-anisic acid)* 48.2%

Inert Ingredients: 51.8%
TOTAL 100.0%

*This product contains 40.0% 3,6-dichloro-p-anisic acid (dicamba) or 4 pounds per gallon (480 g/L).

EPA Reg No. 55947-1

EPA Est. No. 55947-TX-1

Net Contents: 2 1/2 gallons

Sandoz Agro, Inc.

KEEP OUT OF REACH OF CHILDREN

WARNING	AVISO
<p>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.)</p>	

See additional precautionary statements at end of label booklet.

ACCEPTED
with COMMENTS
in EPA Letter Dated

OCT 13 1993

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 55947-1

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- Mixing and Application
- Sensitive Crop Precautions
- Band Treatments
- Compatibility Test
- Procedure for Cleaning Spray Equipment
- General Weed List

FIELD, SEED, POPCORN AND SILAGE CORN

- Weeds Controlled
- Preplant/Preemergence in No-Tillage Corn
- Preemergence in Conventional or Reduced Tillage Corn
- Early Postemergence (All Tillage Systems)
- Late Postemergence (All Tillage Systems)
- Overlay (Sequential) Treatments
- Tank Mix Treatments For Corn
- Rates and Timings

SORGHUM (Milo)

- Weeds Controlled
- Rates and Timings
- Tank Mix Treatment
- Overlay (Sequential) Treatments
- Preharvest Uses

SMALL GRAINS (Wheat, Barley, and Oats)

- Weeds Controlled
- Rates and Timings
- Fall Seeded Wheat
 - Tank Mix Treatments
 - (Special Use Tank Mix for Difficult to Control Weeds)
- Spring Seeded Wheat
 - Tank Mix Treatments
- Fall Seeded Barley
 - Tank Mix Treatments

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Spring Seeded Barley
Tank Mix Treatments
Fall and Spring Seeded Oats
Tank Mix Treatments

SUGARCANE

**PASTURE, RANGELAND AND NON-CROPLAND
(INCLUDING NON-IRRIGATION DITCHBANKS)**

Mixing and Application
Weeds Controlled
Rates and Timings
Tank Mix Treatments
Cut Surface Tree Treatments
Dormant Applications for Control of Multiflora Rose

CONSERVATION RESERVE PROGRAM (CRP) ACRES

Weeds Controlled
Rates and Timings
Tank Mix Treatments

ASPARAGUS

TURF AND LAWNS

GRASS SEED CROPS

**FALLOW AND BETWEEN CROPPING APPLICATIONS (BCA)
FOR BROADLEAF WEED CONTROL**

**CONTROL OF PERENNIAL BROADLEAF WEEDS IN
CROPLAND (Spot Application Only)**

WIPER APPLICATION USES

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals
Environmental Hazards

STORAGE AND DISPOSAL

Limitation of Warranty and Limitation of Liability
Registered Trademarks

60260

(Container Label)

BANVEL• Herbicide

FOR WEED CONTROL IN CORN, SORGHUM, SMALL GRAINS, PASTURE, RANGELAND, NON-CROPLAND, FALLOW, SUGARCANE, ASPARAGUS, TURF AND GRASS SEED CROPS.

Active Ingredient:

Dimethylamine salt of dicamba
(3,6-dichloro-*p*-anisic acid)* 48.2%

Inert Ingredients: 51.8%
TOTAL.... 100.0%

*This product contains 40.0% 3,6-dichloro-*p*-anisic acid (dicamba) or 4 pounds per gallon (480 g/L)

KEEP OUT OF REACH OF CHILDREN

WARNING

AVISO

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See side panel for additional precautionary statements

EPA Reg. No. 55947-1
Net Contents: _____

EPA Est. No. 55947-TX-1
Sandoz Agro, Inc.
Des Plaines, IL 60018

BEST AVAILABLE COPY

ACCEPTED
with COMMENTS
in EPA Letter Dated

OCT 13 1993
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
55947-1

7060

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING **AVISO**

Causes eye irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Avoid breathing spray mist. Wash thoroughly after handling. In case of contact, wash skin with soap and water; for eyes, flush with water for 15 minutes and get medical attention.

Personal Protective Equipment:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

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, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statements:

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

User Safety Recommendations:

Users should:

• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

• 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.

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ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Apply this product only as directed on label.

DIRECTIONS FOR USE

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

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

BEST AVAILABLE COPY

AGRICULTURAL USE REQUIREMENTS

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

Do not 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Do not apply this product through any type of irrigation system.

Refer to the DIRECTIONS FOR USE booklet attached to this container for proper use directions and additional precautionary statements.

STORAGE AND DISPOSAL**PROHIBITIONS**

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

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STORAGE

Store in original container in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

PESTICIDE DISPOSAL

Triple rinse pesticide from containers and use rinsates in the pesticide application. Wastes which cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Plastic or Metal: After triple rinsing (or equivalent), offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, such as burning of plastic containers. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY

NOTICE: Read this Limitation of Warranty and Limitation of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded. 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 such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sandoz or seller. All such risks shall be assumed by buyer or user. Sandoz warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. Sandoz makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty. In no event shall Sandoz or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. The exclusive remedy of the user or buyer, and the exclusive liability of Sandoz or 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 the product or, at the election of Sandoz or seller, the replacement of the product. Sandoz and seller offer this product, and buyer and user accept it, subject to the foregoing limitations of warranty and limitation of liability, which may not be modified by any oral or written

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agreement.

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(Directions for Use)

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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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

• Coveralls

• Waterproof gloves

• Shoes plus socks

• Protective eyewear

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Before applying BANVEL® Herbicide, read all directions and precautions appearing on the container label and in this booklet. Failure to follow all directions and precautions may result in unsatisfactory weed control, crop injury, or illegal residues.

GENERAL INFORMATION

The following directions apply to all uses of BANVEL Herbicide. Additional precautions and restrictions will be found in each specific use section.

Do not treat irrigation ditches or water used for crop irrigation or domestic uses.

Do not apply this product through any type of irrigation system.

MIXING AND APPLICATION

UNLESS OTHERWISE SPECIFIED UNDER THE INDIVIDUAL USE HEADINGS OF THIS BOOKLET, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF BANVEL HERBICIDE. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES AND TIMINGS.

BANVEL Herbicide is a water-soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (see COMPATIBILITY TEST on page ■■■) should be made prior to tank mixing.

Ground or aerial application equipment which will give good spray coverage of weed foliage should be used. HOWEVER, DO NOT USE AERIAL APPLICATION EQUIPMENT IF SPRAY PARTICLES CAN BE CARRIED BY WIND INTO AREAS WHERE SENSITIVE CROPS OR PLANTS ARE GROWING.

Apply 3 to 50 gallons of diluted spray per treated acre when using ground application equipment, or 2 to 10 gallons of diluted spray per treated acre in a water-based carrier when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation. Use coarse sprays.

Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

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To avoid uneven spray coverage, BANVEL Herbicide should not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid disturbing (e.g. cultivating or mowing) treated areas for at least 7 days following application.

SENSITIVE CROP PRECAUTIONS

BANVEL Herbicide may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to BANVEL Herbicide during their development or growing stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING BANVEL HERBICIDE.

- Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of BANVEL Herbicide with the roots of desirable plants such as trees and shrubs.
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of adjacent sensitive crops. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles which are designed to produce minimal amounts of fine spray particles. Examples of nozzles designed to produce coarse sprays via ground applications are Delavan Raindrops, Spraying Systems XR flat fans or large capacity flood nozzles such as D10, TK10 or greater capacity tips. Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gpa, unless otherwise required by the manufacturer of drift-reducing nozzles.
- Agriculturally approved drift-reducing additives may be used.
- Do not apply BANVEL Herbicide adjacent to sensitive crops when the temperature on the day of application is expected to exceed 85° F as drift is more likely to occur.
- To avoid injury to desirable plants, equipment used to apply BANVEL Herbicide should be thoroughly cleaned (see PROCEDURE FOR CLEANING SPRAY EQUIPMENT on page 17) before reusing to apply any other chemicals.

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All crop uses of BANVEL Herbicide are intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crop has occurred. If this interval is shortened, such as in cover crops that will be plowed under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage due to hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations. Tank mix recommendations are for use only in states where the tank mix product and application site are registered.

BAND TREATMENTS

BANVEL Herbicide may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

$$\begin{array}{l} \text{Band width} \\ \text{in inches} \\ \text{Row width} \\ \text{in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{RATE} \\ \text{per treated acre} \end{array} = \begin{array}{l} \text{Band RATE} \\ \text{per treated acre} \end{array}$$

$$\begin{array}{l} \text{Band width} \\ \text{in inches} \\ \text{Row width} \\ \text{in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{VOLUME} \\ \text{per treated acre} \end{array} = \begin{array}{l} \text{Band VOLUME} \\ \text{per treated acre} \end{array}$$

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COMPATIBILITY TEST

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Herbicide to Add to One Pint of Spray Carrier (Assuming Volume is 25 Gallons per Acre)

HERBICIDE FORMULATIONS	RATE PER ACRE	LEVEL TEASPOONS
Dry	1 lb.	1 1/2
Liquid	1 pt.	1/2

If herbicide(s) do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the above described forms will occur within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Rerun the above COMPATIBILITY TEST with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer).

PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of BANVEL Herbicide or tank mixes of BANVEL Herbicide or tank mixes of BANVEL Herbicide plus 2,4-D amine.

- 1)Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the rinse water.
- 2)Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3)Flush the solution out of the spray tank through the boom.
- 4)Remove the nozzles and screens and flush the system with two full tanks of water.

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The steps listed below are suggested for thorough cleaning of spray equipment used to apply BANVEL Herbicide as a tank mix with wettable powders (WP) emulsifiable concentrates (EC), or other types of water-dispersible formulations. BANVEL Herbicide tank mixes with water-dispersible formulations require the use of a water/detergent rinse.

- 5) Complete step 1.
- 6) Fill tank with water while adding 2 lbs. of detergent for every 40 gallons of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3, and 4.

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GENERAL WEED LIST

This is a general list of weeds which may be treated with BANVEL Herbicide in accordance with this label as recommended under the rates and timing sections of the Individual Use Headings. Proper usage of this product will give control or growth suppression of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species including:

ANNUALS

- | | |
|---------------------------------------|---|
| Amaranth, Spiny (Spiny Pigweed) | Nightshade, Black |
| Aster, Slender | Pennycress, Field
(Fanweed, Frenchweed, Stinkweed) |
| Bedstraw | Pepperweed, Virginia
(Peppergrass) |
| Beggarweed, Florida | Pigweed, Prostrate |
| Broomweed, Common | Pigweed, Redroot
(Carelessweed) |
| Buckwheat, Wild | Pigweed, Rough |
| Buffalobur | Pigweed, Smooth |
| Burclover, California | Pigweed (triazine resistant) |
| Burcucumber | Pigweed, Trumble |
| Buttercup, Roughseed | Poorjoe |
| Carpetweed | Puncturevine |
| Catchfly, Nightflowering | Purslane, Common |
| Chamomile, Corn | Pusley, Florida |
| Chickweed, Common | Radish, Wild |
| Clovers (Annual) | Ragweed, Common |
| Cockle, Corn | Ragweed, Giant (Buffaloweed) |
| Cockle, Cow | Ragweed Lance-Leaf |
| Cocklebur, Common | Rubberweed, Bitter
(Bitterweed) |
| Croton, Tropic | Sesbania, Hemp |
| Croton, Woolly | Shepherdspurse |
| Daisy, English | Sicklepod |
| Evening primrose, Cutleaf | Sida, Prickly (Teaweed) |
| Fleabane, Annual | Smartweed, Green |
| Goosefoot, Nettleleaf | Smartweed, Pennsylvania |
| Henbit | Sneezeweed, Bitter |
| Jimsonweed | Sowthistle, Annual |
| Knotweed | Sowthistle, Spiny |
| Kochia | Spikeweed, Common |
| Ladysthumb | Spurge, Prostrate |
| Lambsquarters, Common | Spurry, Corn |
| Lambsquarters
(triazine resistant) | Starbur, Bristly |
| Lettuce, Prickly | Sunpweed, Rough |
| Mallow, Common | Sunflower, Common (Wild) |
| Mallow, Venice | Sunflower, volunteer |
| Mayweed | Thistle, Russian |
| Morningglory, Ivyleaf | Velvetleaf |
| Morningglory, Tall | Waterhemp |
| Mustard, Tansy | |
| Mustard, Wild | |
| Mustard (Yellowtops) | |

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Waterprimrose, Winged
Wormwood, Annual

Burdock, Common
Carrot, Wild
(Queen Anne's Lace)
Cockle, White
Evening primrose, Common
Geranium, Carolina
Gromwell
Knapweed, Diffuse
Knapweed, Spotted

BIENNIALS

Mallow, Dwarf
Plantain, Bracted
Ragwort, Tansy
Starthistle, Yellow
Sweetclover
Teasel
Thistle, Bull
Thistle, Milk
Thistle, Musk
Thistle, Plumeless

PERENNIALS

*Alfalfa
Artichoke, Jerusalem
Aster, Spiny
Waster, Whiteheath
Beadstraw, Smooth
Bindweed, Field
Bindweed, Hedge
Blueweed, Texas
*Bursage (Bur Ragweed)
(Lakweed)
(Povertyweed)
Bursage, Woollyleaf
(Lakweed)
Buttercup, tall
Campion, Bladder
Chickweed, Field
Chickweed, Mouseear
Canada
Chicory
*Clover, Hop
*Dandelion, Common
*Dock Broadleaf (Bitterdock)
*Dock, Curly
Dogbane, Hemp
*Dogfennel (Cypressweed)
Fern, Bracken
Garlic, Wild
Goldenrod, Canada
Goldenrod, Missouri
Goldenweed, Common
Hawkweed
Horsenettle, Carolina
Ironweed
Knapweed, Black
Knapweed, Russian

Mare's Tail (Horseweed)
Milkweed, Climbing
Milkweed, Common
Milkweed, Honeyvine
Milkweed, Western Whorled
Nettle, Stinging
Nightshade, Silverleaf
(White Horsenettle)
Onion, Wild
*Plantain, Broadleaf
Plantain, Buckhorn
Pokeweed
Ragweed, Western
Redvine
Sericia Lespedeza
Smartweed, Swamp
Snakeweed, Broom
*Sorrel, Red (Sheep Sorrel)
Sowthistle
Sowthistle, Perennial
Spurge, Leafy
Sundrop, Halfshrub
(Eveningprimrose)
Thistle, Canada
Toadflex, Dalmatian
Tropical Soda Apple
Trumpetcreeper (Buckvine)
Vetch
Waterhenlock
Waterprimrose, creeping
*Woodsorrel, Creeping
Common Yellow
Wormwood, Common
Wormwood, Louisiana
*Yankeeweed
Yarrow, Common

* Noted perennials may be controlled using BANVEL Herbicide at rate lower than those recommended for

other listed perennial weeds. (See application rates and timing on pages 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000).

WOODY

- Alder
- Ash
- Aspen
- Basswood
- Beech
- Birch
- Blackberry
- Blackgum
- Cedar
- Cherry
- Chinquapin
- Cottonwood
- Creosotebush
- Cucumbertree
- Dewberry
- Dogwood
- Elm
- Grape
- Hawthorn (Thornapple)
- Hemlock
- Hickory
- Honeylocust
- Honeysuckle
- Hornbeam
- Huckleberry
- Huisache
- Ivy, Poison

- Kudzu
- Locust, Black
- Maple
- Mesquite
- Oak
- Oak, Poison
- Olive, Russian
- Persimmon, Eastern
- Pine
- Plum, Sand (Wild Plum)
- Poplar
- Rabbitbrush
- Redcedar, Eastern
- Rose, McCartney
- Rose, Multiflora
- Sagebrush, Fringe
- Sassafras
- Serviceberry
- Spicebush
- Spruce
- Sumac
- Sweetgum
- Sycamore
- Tarbush
- Willow
- Witchhazel
- Yaupon
- Yucca

2/10/00

FIELD, SEED*, POPCORN* AND SILAGE CORN

Observe all precautions, mixing and application instructions on pages ■■■ as well as the following:

- * Do not apply BANVEL Herbicide to seed corn or popcorn without first verifying with your local seed corn company (supplier) the Banvel selectivity on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

BANVEL Herbicide is not registered for use on sweet corn.

Direct contact of BANVEL Herbicide with corn seed must be avoided. If corn seeds are less than 1 1/2 inches below the surface, delay application until corn has emerged.

Up to 2 applications of BANVEL Herbicide may be made during a growing season. Do not exceed a total of 1 1/2 pints of BANVEL Herbicide per treated acre per crop year. Allow two weeks or more between applications of BANVEL Herbicide. See appropriate section for rate information. For combinations options or sequential treatments, refer to appropriate section.

Applications of BANVEL Herbicide to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Agriculturally approved surfactants or sprayable fertilizers (1/2-1 gallon per acre of 28%, 30%, 32% urea ammonium nitrate or 2.5 pounds per acre spray grade ammonium sulfate) may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.

Do not use adjuvants containing penetrants such as petroleum based oils after crop emergence or crop injury may result.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

Several synthetic pyrethroid insecticides are labeled for tankmix applications of BANVEL. Refer to their label for specific recommendations.

250/60

WEEDS CONTROLLED

BANVEL Herbicide will control many ANNUAL broadleaf weeds or give growth suppression of many PERENNIAL broadleaf weeds commonly found in corn. (Refer to the GENERAL WEED LIST on pages [REDACTED])

For best performance, make application when weeds have emerged and are actively growing.

Preemergence control of cocklebur, velvetleaf, and jimsonweed may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

260760

PREPLANT/PREEMERGENCE IN NO-TILLAGE CORN

Applications of BANVEL Herbicide may be made before, during, or after planting to emerged and actively growing broadleaf weeds. Apply BANVEL Herbicide at 1 pint per treated acre on medium or fine textured soils containing 2% or greater organic matter. Use 1/2 pint per treated acre on coarse textured soils (sand, sandy loam, and loamy sand) or medium and fine textured soils with less than 2% organic matter.

When planting into a legume sod (e.g., alfalfa or clover), apply BANVEL Herbicide after 4-6 inches of regrowth has occurred.

PREEMERGENCE IN CONVENTIONAL OR REDUCED TILLAGE CORN

BANVEL Herbicide may be applied after planting and prior to corn emergence. Application at 1 pint per treated acre may be made to medium or fine textured soils which contain 2% or greater organic matter. DO NOT apply to coarse textured soils (sand, sandy loam, and loamy sand) until after crop emergence (see Early Postemergence uses below).

Preemergence application of BANVEL Herbicide does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrate treated soil over seed furrow.

**EARLY POSTEMERGENCE
(ALL TILLAGE SYSTEMS)
(Spike through 8 inch tall corn)**

BANVEL Herbicide at 1 pint per treated acre may be applied during the period from corn emergence through the five leaf stage or 8 inches tall, whichever comes first. Reduce the rate to 1/2 pint per treated acre if corn is growing on coarse textured soils (sand, sandy loam, loamy sand). See Late Postemergence applications given below if the 6th true leaf is emerging from whorl or corn is greater than 8 inches tall.

**LATE POSTEMERGENCE
(ALL TILLAGE SYSTEMS)
(8 to 36 inch tall corn)**

Application of BANVEL Herbicide at 1/2 pint per treated acre may be made from 8 to 36 inch tall corn or 15 days before tassel emergence, whichever comes first. For best performance, make applications when weeds are less than 3 inches tall.

Make directed spray application when: (1) corn leaves prevent proper spray coverage; (2) sensitive crops are growing nearby; (3) tank mixing with 2,4-D.

270460

DO NOT apply BANVEL Herbicide when soybeans are growing nearby if any of these conditions exist:

- corn is more than 24 inches tall
- soybeans are more than 10 inches tall
- soybeans have begun to bloom

OVERLAY (SEQUENTIAL) TREATMENTS

BANVEL Herbicide may be applied to ground previously treated with one or more of the following herbicides:

alachlor (Lasso®, Lasso MT®, Partner®)
 Atrazine
 Bicep®
 Bronco®
 Bullet®
 butylate (Sutan+® /Genate®)
 Clarity®
 cyanazine (Bladex®)
 dimethenamid (Frontier®)
 EPTC (Eradicane®)

Extrazine II®
 glyphosate (Roundup®)
 Lariat®
 Marksman®
 metolachlor (Dual®)
 paraquat (Gramoxone®)
 pendimethalin (Prowl®)
 propachlor (Ramrod®)
 simazine (Princep®)

Apply BANVEL Herbicide at 1/2 pint per treated acre to ground previously treated with full rates of CLARITY or MARKSMAN Herbicides. Allow at least 2 weeks between applications

READ AND FOLLOW LABEL DIRECTIONS FOR EACH OF THE ABOVE PRODUCTS.

TANK MIX TREATMENTS FOR CORN

BANVEL Herbicide may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, and other restrictions.

280460

RATES AND TIMINGS

NAME	PREPLANT/ PREEMERGENT (NO TILLAGE CORN)	PREEMERGENT (CONVENTIONAL OR REDUCED TILLAGE CORN)	EARLY POST- EMERGENT (ALL TILLAGE SYSTEMS)	LATE POSTEMER- GENT (ALL TILLAGE SYS- TEMS)	ADDITIONAL DIRECTIONS
ACCENT® (nicosulfuron)	--	--	1/2-1 ounce ai/A	1/2-1 ounce ai/A (To improve spray coverage of weeds and reduce risk of corn injury, use drop pipes to direct spray beneath corn leaves when corn is greater than 8 inches tall.)	Application may be made to emerged weeds before corn is greater than 24 inches tall. Use non-ionic surfactant at .25% (V/V) with this tank mixture.
Atrazine	1 1/4-2 lbs.ai/A	1 1/4-2 lbs.ai/A	1 1/4-2 lbs.ai/A Crop oil concentrates may be used with this mixture if corn is 5 inches or less in height.	1 1/4-2 lbs.ai/A Do not apply if corn is greater than 12 inches tall.	Application may be made before grasses are 1 1/2" tall. Follow all state and federal restrictions pertaining to applications.
atrazine					
BEACON® (primisulfuron)	--	--	0.31 - 0.62 ounce ai/A	0.31 - 0.62 ounce ai/A (To improve spray coverage of weeds and reduce risk of corn injury, use drop pipes to direct spray beneath corn leaves when corn is greater than 8 inches tall)	Application may be made to emerged weeds when corn is 4 to 24 inches tall. Use non-ionic surfactant at .25% (V/V) with this tank mixture.
BLADEN® (cyanazine)	1 1/4-4 lbs.ai/A	1 1/4-4 lbs.ai/A	1/4-2 lbs.ai/A (use the 90 DF formulation only, after corn emergence.)	--	Application may be made before grasses are 1 1/2 inches tall, and before corn is beyond the 4 leaf stage.
DUAL® (metolachlor)	1 1/2-3 lbs ai/A	1 1/2-3 lbs.ai/A (use only on fine or medium textured soils with 2 1/2% or greater organic matter)	1 1/2-3 lbs.ai/A	--	Application may be made before grasses reach the 2 leaf stage and before corn is greater than 3 inches tall.

29060

RATES AND TIMINGS					
BANVEL PLUS	PREPLANT/ PREEMERGENT (NO TILLAGE CORN)	PREEMERGENT (CONVENTIONAL OR REDUCED TILLAGE CORN)	EARLY POST- EMERGENT (ALL TILLAGE SYSTEMS)	LATE POSTEMER- GENT (ALL TILLAGE SYS- TEMS)	ADDITIONAL DIRECTIONS
FRONTIER (dimethenamid)	13-25 fl. oz/A	13-25 fl. oz/A (use only on fine or medium textured soils with 2.5% or greater organic matter)	13-25 fl. oz/A		Application may be made up to 8 inch tall corn. This treatment must be combined with a herbicide that provides postemergence control of grass weeds if they are greater than 1 inch tall at the time of application.
GRAMOXONE® (paraquat)	1/4-1 lb.ai/A	1/4-1 lb.ai/A	--	--	Application may be made to emerged weeds but prior to corn emergence.
LASSO® (alachlor)	1 1/2-4 lbs.ai/A	1 1/2-4 lbs.ai/A (use only on fine textured soils with greater than 2 1/2% organic matter)	1 1/2-4 lbs.ai/A	--	Application may be made before grasses reach the 2 leaf stage and before corn is greater than 3 inches tall. If forms of alachlor Partner), applications must be made prior to grass emergence.
microencapsulated are used (Lasso MT,					
PRINCEP® (simazine)	2.0-3.0 lbs.ai/A	2.0-3.0 lbs.ai/A	-	--	Application may be made prior to corn or weed emergence.
PROAL® (pendimethalin)	--	3/4-1 1/2 lbs ai/A (Use only on fine or medium textured soils with 2 1/2% or greater organic matter.)	3/4-1 1/2 lbs ai/A	--	Application may be made immedi- ately after planting but prior to weed emergence. Corn should not be beyond the 2- leaf stage of growth.

30060

RATES AND TIMINGS					
BANVEL PLUS	PREPLANT/ PREEMERGENT (NO TILLAGE CORN)	PREEMERGENT (CONVENTIONAL OR REDUCED TILLAGE CORN)	EARLY POST- EMERGENT (ALL TILLAGE SYSTEMS)	LATE POSTEMER- GENT (ALL TILLAGE SYS- TEMS)	ADDITIONAL DIRECTIONS
ROUNDUP® (glyphosate)	1.0-3.0 lbs.ai/A	1.0-3.0 lbs.ai/A	--	--	Application may be made to emerged weeds but prior to corn emergence.
2,4-D	1/4-1/2 lbs.ai/A	1/4-1/2 lbs.ai/A	Not recommended	1/8 lbs.ai/A	Drop pipes are to be used when corn height is 8 inches or greater. Keeping the spray off the corn leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of weed foliage.

SORGHUM (Milo)

Observe all precautions on pages [redacted], including the reference to crops growing under stress.

Read and follow mixing and application instructions on page [redacted].

Applications of BANVEL Herbicide to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 to 14 days.

Do not graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to the pasture use section of this label. Do not apply BANVEL Herbicide to sorghum grown for seed production.

Make no more than one application per growing season.

WEEDS CONTROLLED

BANVEL Herbicide, when applied at the recommended rate for sorghum, will control many actively growing ANNUAL broadleaf weeds and will reduce competition from established PERENNIAL broadleaf weeds as well as control their seedlings. (Refer to GENERAL WEED LIST on pages [redacted])

RATES AND TIMINGS

BANVEL Herbicide may be applied to emerged and actively growing weeds at least 15 days prior to planting. Postemergence application of BANVEL Herbicide must be made after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15 inches tall. For best performance, make applications when sorghum is in the 3-5 leaf stage and weeds are small (less than 3 inches tall). Use drop pipes (drop nozzles) if sorghum is taller than 8 inches. Keeping the spray off the sorghum leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of weed foliage.

BROADCAST RATE PER TREATED ACRE:

1/2 pint (1/4 lb. a.i.)

32060

TANK MIX TREATMENT

BANVEL plus Atrazine

For improved control of emerged, actively growing broadleaf weeds including triazine resistant species and added suppression of perennial broadleaf weeds, tank mix 1/2 pint BANVEL Herbicide with 0.5 to 1.25 lbs. a.i. atrazine per treated acre. For control of grasses (less than 1.5 inches tall), tank mix 1/2 pint BANVEL Herbicide with 2 lbs. a.i. atrazine per treated acre. For best performance and minimal crop injury, make application when sorghum is 3-8 inches tall and when broadleaf weeds are small (less than 6 inches tall). Application of atrazine must be made before sorghum is beyond 12 inches tall. The atrazine rate will depend upon soil texture and length of residual weed control desired. Follow all State and Federal restrictions pertaining to atrazine applications.

Banvel plus Buctril®

For improved control of broadleaf weeds, tank mix 1/2 pint BANVEL Herbicide with 1 - 1 1/2 pint Buctril Herbicide per treated acre. Make application at 4 leaf to 15 inch tall sorghum. Use drop nozzles to direct spray beneath sorghum leaves when sorghum is greater than 8 inches tall.

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS AND OTHER RESTRICTIONS.

33960

OVERLAY (SEQUENTIAL) TREATMENTS

BANVEL Herbicide may be applied to ground previously treated with one or more of the following herbicides:

<u>Herbicide</u>	<u>Maximum rate per treated acre (lbs.a.i.)</u>
alachlor (Lasso) (Screen-treated seed)	4
atrazine ¹	2.5
metolachlor (Dual) (Concep-treated seed)	2.5
propachlor (Ramrod)	5

¹ Maximum use rate for atrazine is determined by soil type, tillage practices used, surface residue, and state or local restrictions. Follow the more restrictive requirements when determining the maximum use rate for atrazine.

**PREHARVEST USES
For Use Only in the States
of Texas and Oklahoma**

BANVEL Herbicide may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance.

Delay harvest until 30 days after treatment.

BROADCAST RATE PER TREATED ACRE:
1/2 pint (1/4 lb. a.i.)

**SMALL GRAINS (WHEAT, BARLEY AND OATS)
Not Underseeded To Legumes**

Observe all precautions on pages [redacted]. Read and follow cleaning, mixing and application instructions on pages [redacted].

Surfactants are not recommended when applying BANVEL Herbicide alone or in tank mixtures on small grains except when tank mixing with sulfonylurea herbicides (such as: Ally, Express, Finesse, Glean, or Harmony Extra). Refer to the label of the sulfonylurea herbicide used for specific surfactant use directions.

Do not use penetrants such as petroleum based oils with BANVEL Herbicide or BANVEL Herbicide tank mixtures after small grain emergence.

Sulfonylurea resistant weeds may not be controlled completely by tank mixes of Banvel with sulfonylurea herbicides. Refer to the tank mix sections from each specific crop for alternative Banvel tank mixtures.

Do not graze or harvest for livestock feed prior to crop maturity.

If small grains are grown for pasture only, refer to the PASTURE, RANGELAND and NON-CROPLAND section pages [REDACTED].

WEEDS CONTROLLED

BANVEL Herbicide will provide suppression or control of annual broadleaf weeds listed below. For improved control of listed weeds plus additional weeds, it is recommended that BANVEL Herbicide be applied in a tank mix with other herbicides. Refer to specific crop for tank mix options.

Buckwheat Tartary	Pennycress, Field
Buckwheat, Wild	Pigweed, Redroot
Chamomile, Corn	(Carelessweed)
Cockle, Corn	Pigweed, Rough
Cockle, Cow	Pigweed, Tumble
Cocklebur, Common	Purslane, Common
Henbit	Ragweed, Common
Knotweed	Ragweed, Giant
Kochia	(Buffaloweed)
Kochia	Smartweed, Green
(sulfonylurea resistant)	Smartweed, Pennsylvania
Knawel (German moss)	Sowthistle, Annual
Ladysthumb	Sunflower, Common
Lambsquarters,	(Wild)
Common	Sunflower, Volunteer
Lettuce, Prickly	Thistle, Russian
Mallow, Common	Velvetleaf
Mustard, Tansy	
Nightshade, Black	

BANVEL Herbicide and BANVEL Herbicide tank mixes will reduce competition from established PERENNIAL broadleaf weeds and control their seedlings. (Refer to GENERAL WEED LIST on pages [REDACTED].)

THE SPECIAL USE TANK MIX FOR FALL SEEDED WHEAT ONLY allows a higher rate of 2,4-D to be used in combination with BANVEL Herbicide. This tank mix treatment may be used for improved performance of difficult-to-control weeds including:

*Fiddleneck (Tarweed) Gromwell

35 of 60

Garlic, Wild

*Onion, Wild

* Spring applications may not control weeds that develop in the fall. For fall applications, refer to the BETWEEN CROPPING APPLICATIONS section, pages [REDACTED].

RATES AND TIMINGS

Application of BANVEL Herbicide may be made before, during or after planting to emerged and actively growing weeds. Use BANVEL Herbicide at 4 fluid ounces (0.125 lb.ai) per treated acre in wheat, fall seeded barley, and oats; and at 3 fluid ounces (0.094 lb. ai) per treated acre in spring seeded barley. BANVEL Herbicide is most effective when used in a tank mix with other herbicides. Refer to specific crop for BANVEL Herbicide rate and application timing. For best performance, make application when weeds are in the 2-3 leaf stage and rosettes are less than 2 inches across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

FALL AND SPRING SEEDED WHEAT

BANVEL HERBICIDE MUST BE APPLIED TO FALL SEEDED WHEAT PRIOR TO THE JOINTING STAGE. APPLICATIONS TO SPRING SEEDED WHEAT MUST BE MADE BEFORE WHEAT EXCEEDS THE 5 LEAF STAGE.

TANK MIX TREATMENTS

For control of grasses or additional broadleaf weeds, BANVEL Herbicide may be tank mixed with the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

360/60

BROADCAST RATE PER TREATED ACRE:

Apply 2 - 4 fluid ounces (0.063 - 0.125 lb. a.i.) BANVEL
Herbicide with:

Herbicide	product amount*	lb. a.i.
2,4-D Amine or Ester	8 - 12 fluid ounces	0.250 - 0.375
MCPA Amine or Ester	8 - 12 fluid ounces	0.250 - 0.375

- bromoxynil
- Buctril®
- bromoxynil + MCPA
- Bronate®
- clopyralid
- Stinger®
- clopyralid + 2,4-D
- Curtail®
- clopyralid + MCPA
- Curtail®--M
- diuron **
- Karmex®
- fenoxaprop-ethyl + MCPA
- Dakota®
- fenoxaprop-ethyl + MCPA + 2,4-D
- Tiller®
- metribuzin **
- Sencor®
- sulfonylureas
- (such as: Ally®, Express® Finesse®,
Glean®, Harmony® Extra, Amber®)

**CONSULT
PRODUCT LABELS
FOR RATE
RECOMMENDATIONS**

- * Based on 4 pounds per gallon formulations of MCPA and 2,4-D.
- ** Tank mixtures for fall seeded wheat only.

**SPECIAL USE TANK MIX FOR
FALL SEEDED WHEAT ONLY**

BANVEL	4 fluid ounces	0.125 lb. a.i.
plus	plus	plus
2,4-D amine	1 to 2 pints	0.50 to 1 lb. a.i.
or	or	or
2,4-D ester	1 to 1 1/2 pts	0.50 to 0.75 lb. a.i.

Note: Do not use unless possible crop injury will be acceptable.

FALL SEEDED BARLEY

BANVEL HERBICIDE MUST BE APPLIED TO FALL SEEDED BARLEY PRIOR TO THE JOINTING STAGE.

Note: For fall barley varieties that are seeded during the winter months or later, follow the rates and timings given for Spring Seeded Barley.

TANK MIX TREATMENTS

For control of additional broadleaf weeds, BANVEL Herbicide may be tank mixed with the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE:

Apply 2 - 4 fluid ounces (0.063 - 0.125 lb. a.i.) BANVEL Herbicide with:

Herbicide	product amount*	lb. a.i.
2,4-D Amine or Ester	8 fluid ounces	0.250
MCPA Amine or Ester	8 - 12 fluid ounces	0.250 - 0.375

sulfonylureas (such as: Ally®, Express®, Finesse®, Glean®, Harmony® Extra, Amber®)	CONSULT	PRODUCT LABELS FOR RATE RECOMMENDATIONS
metribuzin Sencor®		

* Based on 4 pounds per gallon formulations of MCPA and 2,4-D.

SPRING SEEDED BARLEY

BANVEL HERBICIDE MUST BE APPLIED BEFORE SPRING SEEDED BARLEY EXCEEDS THE 4 LEAF STAGE.

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TANK MIX TREATMENTS

For control of additional broadleaf weeds, BANVEL Herbicide may be tank mixed with the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE:

Apply 2 -3 fluid ounces (0.063 - 0.094 lb. a.i.) BANVEL Herbicide with:

Herbicide	amount product*	lb. a.i.
MCPA	1/2 pint	0.250
clopyralid + MCPA Curtail®-M metribuzin Sencor sulfonylureas (such as: Ally®, Express®, Finesse®, Glean®, Harmony® Extra, Amber®		CONSULT PRODUCT LABELS FOR RATE RECOMMENDATIONS

* Based on 4 pounds per gallon formulations of MCPA.

FALL AND SPRING SEEDED OATS

BANVEL HERBICIDE MUST BE APPLIED BEFORE SPRING SEEDED OATS EXCEED THE 5 LEAF STAGE. APPLICATIONS TO FALL SEEDED OATS MUST BE MADE PRIOR TO THE JOINTING STAGE.

TANK MIX TREATMENTS

For control of additional broadleaf weeds, BANVEL Herbicide may be tank mixed with the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

BROADCAST RATE PER TREATED ACRE:

Apply 2 - 4 fluid ounces (0.063 - 0.125 lb. a.i.) BANVEL Herbicide with:

Herbicide	amount product*	lb.a.i.
MCPA*	8 - 12 fluid ounces	0.25 - 0.375

* Based on 4 pounds per gallon formulations of MCPA.

SUGARCANE

Observe all precautions on pages [redacted]. Read and follow mixing and application instructions on pages [redacted].

Consult your local or state authorities for possible application restrictions, especially concerning aerial applications and advice concerning special local use situations.

WEEDS CONTROLLED

BANVEL Herbicide, when applied at recommended rates, will control many ANNUAL, BIENNIAL and PERENNIAL broadleaf weeds commonly found in sugarcane. (Refer to GENERAL WEED LIST on pages [redacted]).

RATES AND TIMINGS

Application of BANVEL Herbicide may be made any time after weeds have emerged and are actively growing but before the close-in stage of sugarcane. Application rates and timings of BANVEL Herbicide are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

Weed Stage and Type	Amount Product	Broadcast rate per treated acre lbs. a.i.
Annual		
Small, actively growing	1/2-1 pt.	1/4-1/2
Established weed growth	1-1 1/2 pts.	1/2-3/4
Biennial	1-2 pts.	1/2-1
Perennial		
Noted (*pg [redacted]) Perennials	2-4 pts.	1-2
Other Perennials	4-6 pts.	2-3*

*Application made over the top of actively growing sugarcane may result in crop injury.

When possible, direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage.

Retreatments may be made as needed, however, do not exceed a total of 6 pints (3 lbs. a.i.) of BANVEL Herbicide per treated acre during a growing season.

TANK MIX TREATMENTS

BANVEL Herbicide may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, weeds controlled, geographic and other restrictions.

Herbicide	Rates per treated acre (lbs. a.i.)
ametryn (Evik)	2/5 to 8
asulam (Asulox)	2 to 3 1/3
atrazine	2/5 to 4
dalapon	3 1/2 to 8 1/2
2,4-D	1/2 to 3*

* Application of BANVEL Herbicide plus 2,4-D tank mix at the higher listed rate ranges may result in crop injury.

PASTURE, RANGELAND AND NON-CROPLAND AREAS

BANVEL Herbicide is recommended for use on pasture, rangeland, general farmstead weed and brush control and for use on non-cropland areas such as fence rows, roadways, rights-of-way (utility, railroad, highway, pipeline), non-selective forest brush control (including site preparation), non-irrigation ditchbanks, wasteland and other non-cropland areas.

Observe all precautions on pages [redacted]. Read and follow mixing and application instructions on pages [redacted].

BANVEL Herbicide uses described in this section also pertain to small grains (such as barley, forage sorghum, oats, rye, sudangrass or wheat) grown for pasture use only.

NEWLY SEEDED AREAS, including small grains grown for pasture may be severely injured if rates of BANVEL Herbicide greater than 1 pint/A are applied.

ESTABLISHED GRASS CROPS growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Furthermore, rates of BANVEL Herbicide in excess of 2 quarts (2 lbs. a.i.) per treated acre may cause temporary injury to many grass species.

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Bentgrass, carpetgrass, buffalograss and St. Augustine grass may be injured at rates exceeding 1 pint BANVEL Herbicide (1/2 lb. a.i.) per treated acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch and other legumes.

REMOVE MEAT ANIMALS FROM TREATED AREAS 30 DAYS PRIOR TO SLAUGHTER. THERE IS NO WAITING PERIOD BETWEEN TREATMENT AND GRAZING FOR NON-LACTATING ANIMALS.

**TIMING RESTRICTIONS FOR LACTATING
DAIRY ANIMALS FOLLOWING
TREATMENT**

BANVEL Herbicide Rate per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint (1/2 lb. a.i.)	7 days	37 days
Up to 1 quart (1 lb.a.i.)	21 days	51 days
Up to 2 quarts (2 lbs. a.i.)	40 days	70 days
Up to 8 quarts (8 lbs.a.i.)	60 days	90 days

Note: Observe all precautions and restrictions on labels of products used in tank mixtures.

MIXING AND APPLICATION

BANVEL Herbicide can be applied using water, oil in water emulsions including invert systems, or sprayable fluid fertilizer as a carrier. A COMPATIBILITY TEST (page 1 of this booklet) should be made prior to tank mixing.

To prepare oil in water emulsions, half-fill spray tank with water, then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel oil or fuel oil) or a premix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers.

BANVEL Herbicide may be applied broadcast using either ground or aerial application equipment. When using ground equipment, apply 3 to 600 gallons of diluted spray per treated acre. Volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used. When using aerial equipment apply 2 to 40 gallons of diluted spray

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per treated acre in a water-based carrier.

BANVEL Herbicide may be applied to individual clumps or small areas (SPOT TREATMENT) of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to run-off) of foliage and stems.

Herbicide adjuvants or other spray additives (emulsifiers, surfactants, wetting agents, drift control agents, or penetrants) may be used for wetting, penetration, or drift control. Spray additives must be agriculturally approved when used in pasture applications. If spray additives are used, read and follow all use recommendations and precautions on product label.

WEEDS CONTROLLED

BANVEL® Herbicide, when applied at recommended rates, will give control of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species commonly found in pasture, rangeland and non-cropland areas. (Refer to GENERAL WEED LIST on pages [redacted].) Noted (*) PERENNIAL weeds may be controlled with lower rates of either BANVEL Herbicide or BANVEL Herbicide plus 2,4-D. See RATES AND TIMINGS below.

RATES AND TIMINGS

Application rates and timing of BANVEL Herbicide are given below. Use the higher level of listed rate ranges when treating dense or tall vegetative growth.

Weed Stage & Type	Amount Product	Broadcast rate per
		treated acre
		lbs. a.i.
Annual		
Small, actively growing	1/2-1 pt.	1/4-1/2
Established weed growth	1-1 1/2 pts.	1/2-3/4
*Biennial		
Rosette diameter		
Less than 3 inches	1/2-1 pt.	1/4-1/2
3 inches or more	1-2 pts.	1/2-1
Bolting	2-3 pts.	1-1 1/2
Perennial		
Suppression or top growth control	1/2-1 qt.	1/2-1
Noted (*) Perennials	1-2 qts.	1-2
Other perennials	2-4 qts.	2-4
Dense stands	4-6 qts.	4-6

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Woody Brush & Vines		
Foliage Suppression	1/2-1 qt.	1/2-1
Stems	1-2 qts.	1-2
Stems and Stem Sprouts	1/2-1 gal.	2-4
Stems and Root Sprouts	1-2 gals.	4-8

* For best performance, make application when BIENNIAL WEEDS are in the rosette stage.

Retreatments may be made as needed; however, do not exceed a total of 2 gallons (8 lbs. a.i.) of BANVEL Herbicide per treated acre during a growing season.

TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND OTHER RESTRICTIONS. BANVEL Herbicide may be tank mixed with one or more of the following herbicides for control of grasses, additional broadleaf weeds, and woody brush and vines.

Herbicide	Rates per treated acre (lbs.a.i.)
Pasture, rangeland, and non-cropland use:	
glyphosate (Roundup®)	3/4 to 3 3/4
metasulfuron methyl (Ally®)	0.0038 TO 0.011
paraquat (Gramoxone®)	1/2 to 1
picloram (Tordon®)	1/8 to 3
triclopyr (Garlon®)	3/4 to 9
2,4-D	1/4 to 6
Non-cropland use only:	
amitrole	2 to 8
atratol (Atratol®)	4 4/5 to 10
atrazine	4 4/5 to 10
bromacil (Hyvar®)	1 1/2 to 24
dalapon	4 1/4 to 12 3/4
diquat	1/2
diuron (Karmex®)	4 to 12
fosamine ammonium (Krenite®)	6 to 12
hexazinone (Velpar®)	2 to 12
MSMA	2
norflurazon (Solican®)	2 to 4
prometon (Pramitol®)	10 to 60
simazine (Princep®)	4 4/5 to 10
sulfometuron methyl (Oust®)	0.14 to 0.56
tebuthiuron (Spike®)	1 to 16
2,4-DP (Weedone®)	1/2 to 11

Due to the variations that may occur in formulated products and specific use ingredients (e.g. water supplies), a COMPATIBILITY TEST as described on pages ■ is recommended prior to actual tank mixing.

CUT SURFACE TREE TREATMENTS

BANVEL Herbicide may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees. A mix of 1 part BANVEL Herbicide with 1 to 3 parts water should be used in application. Use the lower dilution when treating difficult-to-control species.

FRILL OR GIRDLE TREATMENTS: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint cut surface with the BANVEL Herbicide/water mix.

STUMP TREATMENTS: Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

Note: For more rapid foliar effects, 2,4-D may be added to the BANVEL Herbicide/water mix.

DORMANT APPLICATIONS FOR CONTROL OF MULTIFLORA ROSE

BANVEL Herbicide can be applied when plants are dormant as an undiluted SPOT-CONCENTRATE directly to the soil or as a LO-OIL BASAL BARK treatment using an oil-water emulsion solution.

SPOT-CONCENTRATE applications of BANVEL Herbicide should be applied directly to the soil as close as possible to the root crown but within 6-8 inches of the crown. On sloping terrain, application should be made to the uphill side of the crown. Do not make application when snow or water prevents applying BANVEL Herbicide directly to the soil. The use rate of BANVEL Herbicide is dependent on the canopy diameter of the multiflora rose. Examples: Use BANVEL Herbicide at 1/4, 1, or 2 1/4 fluid ounces of product respectively, for 5, 10, or 15 feet canopy diameters. Do not exceed a total of 2 gallons BANVEL Herbicide per acre per year.

LO-OIL BASAL BARK applications of BANVEL Herbicide should be applied to the basal stem region from the ground line up to a height of 12-18 inches. Spray until runoff, with special emphasis on covering the root crown. For best results, make application when plants are dormant. Do not make application after bud break or when plants are showing signs of active growth. Do not make application when snow or water prevents applying BANVEL Herbicide to the ground line. Refer to Mixing and Applications above in this section for method of preparing oil-in-water emulsion. Example for

making approximately 2 gallons of a Lo-Oil spray solution mixture: combine 1 1/2 gallons water plus 1 ounce emulsifier plus 1 pint BANVEL® Herbicide plus 2 1/2 pints of No. 2 diesel fuel. Adjust amounts of materials used proportionately to the amount of final spray solution desired. Do not exceed 30 gallons of spray solution mix applied per acre per year.

CONSERVATION RESERVE PROGRAM (CRP) ACRE

BANVEL Herbicide is recommended for use on both newly seeded and established grasses grown in Conservation Reserve or Federal Set-Aside Programs.

Observe all precautions, mixing and application directions on pages _____.

BANVEL Herbicide treatment will injury or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

Agriculturally approved surfactants may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.

Do not use adjuvants containing penetrants such as petroleum based oils after grass emergence on newly seeded grasses.

NEWLY SEEDED AREAS

BANVEL Herbicide may be applied either preplant or postemergence to newly seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3 leaf stage. Rates of BANVEL Herbicide greater than 1 pint per treated acre may severely injure newly seeded grasses. Preplant applications - injury to new seedings may occur if intervals between application and grass planting is less than 45 days per pint of BANVEL Herbicide per treated acre West of the Mississippi River or 20 days per pint East of the Mississippi River.

ESTABLISHED GRASS STANDS

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species: bentgrass, carpetgrass, smooth brome, buffalograss or St. Augustine grass may be injured when treated with BANVEL Herbicide at rates exceeding 1 pint per treated acre.

WEEDS CONTROLLED

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BANVEL Herbicide, when applied at recommended rates, will control many annual and biennial weeds and provide control or suppression of many perennial weeds. (Refer to General Weed List on pages ___)

RATES AND TIMINGS

Application rates and timing of BANVEL Herbicide treatment are given below. Use the higher rate of the rate range when vegetation is either dense or tall, or when weeds are growing under stressed conditions such as drought or cool temperature.

Weed Type* & Stage	Broadcast Rate Per Treated Acre	
	Amount of Formulated BANVEL Herbicide	Equivalent lbs a.i.
	-----pints-----	
Annuals		
-Small actively growing	1/4 to 1	1/8 to 1/2
-Established weed growth	1	1/2
Biennials**		
-Rosette diameter		
a) less than 3 inches	1/2 to 1	1/4 to 1/2
b) 3 inches or greater	1 to 2	1/2 to 1
c) bolting biennial	2 to 3	1 to 1 1/2
Perennials**		
Suppression/Control	2 to 4	1 to 2

*For best results, treat Biennial weeds with BANVEL Herbicide when they are in the rosette stage of growth. Retreatments may be made as needed; however, DO NOT EXCEED A TOTAL OF 2 QUARTS (2 lb a.i.) of BANVEL Herbicide per treated acre during a growing season.

TANK MIX TREATMENTS

To control grasses and additional broadleaf weeds, BANVEL Herbicide may be tank mixed with other herbicides registered for use in Conservation Reserve Programs such as 2,4-D, glyphosate (Roundup®), paraquat (Gramoxone®), metsulfuron (Ally®) and others.

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES, AND OTHER RESTRICTIONS.

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ASPARAGUS

For Use Only in the States of California,
Oregon and Washington

IMPORTANT

Observe all precautions on pages [redacted]. Read and follow mixing and application instructions on pages [redacted].

If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

Do not harvest prior to 24 hours after treatment.

Multiple applications may be made per growing season. Do not exceed a total of 1 pint of Banvel Herbicide per treated acre per crop year.

RATES AND TIMINGS

Apply BANVEL Herbicide to emerged and actively growing weeds in 40 to 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting.

Weeds	Rate Per Treated Acre
Mustard, Black Pigweed, Redroot (carelessweed) Sowthistle, Annual	1/2 to 1 pt. (1/4-1/2 lb.a.i.)
*Thistle, Canada Thistle, Russian	
*Bindweed, Field Chickweed, Common Goosefoot, Nettleleaf Radish, Wild Thistle, Milk	1 pt. (1/2 lb. a.i.)

BANVEL Herbicide may be applied in a tank mixture with either 2,4-D or Roundup Herbicide for improved control of noted (*) weeds. READ AND FOLLOW 2,4-D or Roundup Herbicide PRODUCT LABELING FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS, AND OTHER RESTRICTIONS.

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TURF AND LAWNS

Including Golf Course Fairways, Aprons, Tees and Rough.

IMPORTANT

Observe all precautions on page [REDACTED]. Read and follow mixing and application instructions on pages [REDACTED].

To avoid injury to newly seeded grasses, application of BANVEL Herbicide should be delayed until after the second mowing. Furthermore, application rates in excess of 1 pint (1/2 lb. a.i.) per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustine grass.

In areas where roots of sensitive plants extend, do not apply in excess of 1/4 pint (1/8 lb. a.i.) of BANVEL Herbicide per treated acre on coarse textured (sandy-type) soils, or in excess of 1/2 pint (1/4 lb. a.i.) per treated acre on fine textured (clayey-type) soils. Do not make repeat applications in these areas for 30 days and until previous applications of BANVEL Herbicide have been activated in the soil by rain or irrigation.

WEEDS CONTROLLED

BANVEL Herbicide, when applied at recommended rates, will give control of many ANNUAL, BIENNIAL, and noted (*) PERENNIAL broadleaf weeds commonly found in turf. BANVEL Herbicide will also give growth suppression of many other listed PERENNIAL broadleaf weeds and WOODY brush and vine species. (Refer to GENERAL WEED LIST on pages [REDACTED].)

MIXING AND APPLICATION

Apply 30 to 200 gallons of diluted spray per treated acre (3 qts. to 4 1/4 gals. per 1,000 sq. ft.), depending on density or height of weeds treated and on the type of equipment used.

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RATES AND TIMINGS

Use the higher level of listed rate ranges when treating dense vegetative growth.

BANVEL Herbicide

Weed Stage & Type	pints per treated acre	lbs.a.i. per treated acre	teaspoons per 1000 sq. ft
Annual			
Small, actively growing	1/2 to 1	1/4 to 1/2	1 to 2 1/4
Established weed growth	1 to 1 1/2	1/2 to 3/4	2 1/4 to 3 1/4
Biennial Rosette diameter			
Less than 3 inches	1/2 to 1	1/4 to 1/2	1 to 2 1/4
3 inches or more	1 to 2	1/2 to 1	2 1/4 to 4 1/2
Perennials and Woody			
Brush and Vines	1 to 2	1/2 to 1	2 1/4 to 4 1/2

For best performance, apply when weeds are emerged and actively growing.

Retreatments may be made as needed; however, do not exceed a total of 2 pints (1 lb. a.i.) BANVEL Herbicide per treated acre during a growing season.

TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS AND OTHER RESTRICTIONS.

Tank mix treatments of BANVEL Herbicide may be made with 2,4-D, MCPA, MCPP, or bromoxynil for control of additional weeds listed on the tank mix product label.

Apply 1/5 to 1/2 pint (1/10-1/4 lb. a.i.) of BANVEL Herbicide per treated acre with 1/2 to 1 1/2 lbs. acid equivalent of 2,4-D, MCPA, or MCPP, or with 3/8 to 1/2 lb. a.i. of bromoxynil. Use the higher level of the listed rate ranges when treating established weeds. Repeat treatments may be made as needed; however, do not exceed 2 pints (1 lb. a.i.) of BANVEL Herbicide per treated acre during the growing season.

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GRASS SEED CROPS

Grasses Grown for Seed such as Bermuda grass, Bluegrass,
Lawntype Fescue and Ryegrass

IMPORTANT

Observe all precautions on pages [REDACTED]. Read and follow mixing and application instructions on pages [REDACTED].

Refer to the PASTURE, RANGELAND, AND NON-CROPLAND IMPORTANT section (pages [REDACTED]) for possible grazing and feeding restrictions.

Do not use on bentgrass unless possible crop injury can be tolerated.

RATES AND TIMINGS

Apply 1/2 to 2 pints (1/4-1 lb.a.i.) of BANVEL Herbicide in 5 to 40 gallons of diluted spray per treated acre after weeds have emerged and are actively growing for control of broadleaf weeds such as:

Alfalfa
*Bindweed, Field
Catchfly,
Nightflowering
Chamomile, Corn
Chickweed, Common
Chickweed, Mouseear
Clover

Cockle, White
Dock, Curly
*Knapweed, Russian
Knotweed
Sorrel, Red
(Sheep Sorrel)
Starwort, Little
*Thistle, Canada

* Top growth only.

Use 1/2 to 1 pint (1/4-1/2 lb. a.i.) of BANVEL Herbicide per treated acre on SEEDLING GRASS after the crop reaches the 3-5 leaf stage. Up to 2 pints (1 lb. a.i.) of BANVEL Herbicide per treated acre may be used on well-established PERENNIAL grass. DO NOT APPLY AFTER THE GRASS SEED CROP BEGINS TO JOINT. BANVEL Herbicide may be tankmixed with other broadleaf herbicides registered for use in Grass Seed Production. READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS AND OTHER RESTRICTIONS.

For control of ANNUAL GRASS WEEDS such as:
Brome, Downy (Cheatgrass)

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Brome, Ripgut
Fescue, Rattail

Apply 2 to 4 quarts (2-4 lbs.a.i.) of BANVEL Herbicide per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made immediately following the first irrigation when the soil is moist and before weeds have more than 2 leaves.

FALLOW AND BETWEEN CROPPING APPLICATIONS (BCA) FOR BROADLEAF WEED CONTROL

IMPORTANT

Observe all precautions on pages [redacted]. Read and follow mixing and application instructions on pages [redacted].

WEEDS CONTROLLED

BANVEL Herbicide, when applied at the recommended rates, will control many ANNUAL and BIENNIAL broadleaf weeds. (Refer to General Weed List on pages [redacted] to [redacted]). In addition, BANVEL Herbicide will control the following PERENNIAL broadleaf weeds:

- *Alfalfa
- Artichoke, Jerusalem
- Bindweed, Field
- Bindweed, Hedge
- Blueweed, Texas
- *Bursage
 - (Bur Ragweed)
 - (Povertyweed)
 - (Lakeweed)
- *Dandelion, Common
- *Dock, Curly
- *Dogbane, Hemp
- **Garlic, Wild
- Horsenettle, Carolina
- Nightshade, Silverleaf
- Redvine
- Smartweed, Swamp
- *Sowthistle, Perennial
- **Thistle, Canada
- Trumpet creeper
(Buckvine)

Noted (*) perennials may be controlled using BANVEL Herbicide at rates lower than those recommended for other listed perennial weeds. (See RATES AND TIMINGS, pages [redacted].)

**SEE SPECIAL TANK MIX TREATMENTS, page [redacted], for specific control program.

RATES AND TIMINGS

Apply BANVEL Herbicide as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest and before a killing frost. Agriculturally approved spray additives, such as

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surfactants or oils, may be used to enhance spray coverage and the herbicide's penetration of weed foliage. See ROTATIONAL CROPS for recommended interval between application and planting to prevent crop injury.

For best performance, make application when ANNUAL weeds are less than 6 inches tall, when BIENNIAL weeds are in the rosette stage, and to PERENNIAL weed regrowth in late summer or fall following a mowing or tillage treatment. Most effective control of upright perennial broadleaf weeds, such as Canada thistle and Jerusalem artichoke, occurs if application is made when the majority of weeds are 8 inches or taller. Viney perennial broadleaf weeds, such as field bindweed and hedge bindweed, are best controlled when weeds are in or beyond the full bloom stage.

Avoid disturbing treated areas for at least 7 days following application. Treatments may not kill weeds which develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for BANVEL Herbicide. For seedling control, a follow-up program or other cultural practices could be instituted (refer to pages ■■■ to ■■■, for small grain in-crop uses of BANVEL Herbicide.

Weed Stage & Type	BANVEL HERBICIDE per treated acre	
	amount product	lbs a.i.
Annual	1/2-1 pt.	1/4-1/2
Biennial	1-2 pts.	1/2-1
Perennial		
Perennial suppression	1-2 pts.	1/2-1
Noted (*) perennials	2-4 pts.	1-2
Other perennials	4 pts.	2

Retreatments may be made as needed; however, do not exceed a total of 4 pints (2 lbs. a.i.) of BANVEL Herbicide per treated acre during any given fallow period.

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TANK MIX TREATMENTS

BANVEL Herbicide may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, weeds controlled and geographic or other restrictions.

Herbicide	Rate per treated acre (lbs. a.i.)
ANNUAL WEED CONTROL	
atrazine	1/2 to 3
chlorsulfuron*(Glean®)	0.016 to 0.024 (1/3-1/2 wt.oz.product)
cyanazine (Bladex®)	1 3/5 to 3 1/5
glyphosate (Roundup®)	1/4 to 1/2
metribuzin (Sencor®, Lexone®)	1/3 to 3/4
paraquat	1/2 to 1
2,4-D	1/4 to 1/2
BIENNIAL OR PERENNIAL WEED CONTROL,	
glyphosate	1 to 2
2,4-D	1 to 2
picloram (Tordon®)	1/8 - 1/4

* When making tank mix applications with Glean, add a surfactant of at least 80% active ingredient at the rate of 1-2 quarts/100 gallons of spray or not more than 1/4-1/2% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature weeds or dense vegetative growth.

SPECIAL TANK MIX TREATMENTS

For suppression of perennial weeds, apply 0.25-0.50 lb. a.i. BANVEL Herbicide with 0.25-0.50 lb. a.i. Roundup herbicide per treated acre.

For wild garlic control, apply 1 pint (1/2 lb. a.i.) BANVEL Herbicide with 1 1/2 lbs. acid equivalent 2,4-D low volatile ester per treated acre. Apply when wild garlic is 4 to 8 inches tall.

For Canada thistle control, use BANVEL Herbicide or BANVEL Herbicide plus Roundup Herbicide tank mix treatments.

Application may be made during fallow periods for control of volunteer barley, bulbous bluegrass, downy brome, jointed goatgrass, common rye and volunteer wheat when they are actively

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growing. Use 1 pint BANVEL Herbicide with 1/2-3/4 lb. Kerb 50W (0.25-0.38 lb. a.i.). Fall seeded wheat may be planted 9 months or more after application. For best performance, make application between mid-October and mid-December, prior to soil freeze up.

During fallow periods, apply BANVEL Herbicide plus Landmaster Herbicide to give improved control of kochia, wild buckwheat, prickly lettuce, field bindweed and Canada thistle. Use 4-8 fluid ounces of BANVEL Herbicide plus 40-54 fluid ounces of Landmaster Herbicide for annual weed control or 8-16 fluid ounces of BANVEL Herbicide plus 40-54 fluid ounces of Landmaster Herbicide for perennial weed suppression.

ROTATIONAL CROPS

The following recommendations are based on BANVEL Herbicide use rates up to 4 pints (2 lbs. a.i.) per treated acre. CORN and SORGHUM may be planted in the spring following applications made during the previous year.

SOYBEANS may be planted in the spring following applications made during the previous year. If less than 1 inch of rainfall occurs between application and first killing frost, treated areas should be cultivated to allow herbicide to come in contact with moist soil. Cultivation may take place before or immediately after ground thaw.

Soybean injury may occur if the interval between application and planting is less than specified. In areas with greater than 30 inches of rainfall, delay planting for 30 days per pint of BANVEL Herbicide per treated acre. In areas with less than 30 inches of rainfall, delay planting for 45 days per pint of BANVEL Herbicide per treated acre. Exclude days when ground is frozen.

WHEAT may be planted in the fall or spring following applications. Also, spot applications may be made any time prior to crop emergence if crop injury can be tolerated in treated areas. Wheat injury may occur if the interval between application and planting is less than the following specifications:

East of the Mississippi River, the interval is 20 days per pint of BANVEL Herbicide per treated acre. Exclude days when ground is frozen.

West of the Mississippi River, the interval is 45 days per pint of BANVEL Herbicide per treated acre. Exclude days when ground is frozen.

Following a normal harvest of corn, sorghum, soybeans, or wheat, any rotational crop may be planted. If the interval before harvest is shortened, such as when cover crops will be plowed under, do not follow up with the planting of a sensitive crop.

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CONTROL OF PERENNIAL BROADLEAF WEEDS IN CROPLAND

(SPOT APPLICATION ONLY)

For Use Only in the States of Idaho,
Montana, Nevada, Oregon, Utah,
and Washington.

IMPORTANT

Observe all precautions on pages [redacted]. Read and follow mixing and application instructions on pages [redacted].

Do not treat subirrigated cropland or areas where the soil remains saturated with water throughout the year.

Make only one application of BANVEL Herbicide per year.

WEEDS CONTROLLED

BANVEL Herbicide, when applied at recommended rates, will control many broadleaf weeds including:

- | | |
|---------------------------------|-------------------|
| Bindweed, Field | Knapweed, Russian |
| Dock, Broadleaf
(Bitterdock) | Ragwort, Tansy |
| Dock, Curly | Spurge, Leafy |
| Knapweed, Black | Thistle, Canada |

RATES AND TIMINGS

BANVEL Herbicide may be applied at any time allowing a crop harvest to stubble fallow or other cropland. Application should be made when weeds are actively growing and prior to a killing frost.

Apply 4 to 6 quarts (4-6 lbs. a.i.) of BANVEL Herbicide per treated acre. Application may be made up to one month prior to the planting of wheat.

Note: Do not use unless injury to wheat or rotated barley will be acceptable.

Barley, oats, corn, sorghum (milo), annual or perennial grass crops may be planted into treated areas one year after application. Crops grown for seed (other than perennial grass seed) should not be planted into treated areas until three years after application. Do not plant broadleaf crops such as alfalfa, beans, peas, potatoes, or sugarbeets into treated areas until two years after application.

In most cases, treatments will not kill perennial weed seedlings which germinate from seed one or two years after treatment. Once the effect of the chemical has been lost, a follow-up program for seedling control or other cultural practices should be instituted.

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WIPER APPLICATION USES

IMPORTANT

Observe all precautions on pages [REDACTED].

BANVEL Herbicide may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution containing 1 part BANVEL Herbicide to 1 part water. Do not contact desirable vegetation with herbicide solution. Wiper application should only be made to crops (including pastures) and non-cropland areas described in this label with the exception of Grain Sorghum (Milo).

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING AVISO

Causes eye irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Avoid breathing spray mist. Wash thoroughly after handling. In case of contact, wash skin with soap and water; for eyes, flush with water for 15 minutes and get medical attention.

Personal Protective Equipment:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

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, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statements:

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

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User Safety Recommendations:

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Apply this product only as directed.

STORAGE AND DISPOSAL

PROHIBITIONS

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

STORAGE

Store in original container in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

PESTICIDE DISPOSAL

Triple rinse pesticide from containers and use rinsates in the pesticide application. Wastes which cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Plastic or Metal: After triple rinsing (or equivalent), offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, such as burning of plastic containers. If burned, stay out of smoke.

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LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY

NOTICE: Read this Limitation of Warranty and Limitation of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded. 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 such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sandoz or seller. All such risks shall be assumed by buyer or user. Sandoz warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. Sandoz makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty. In no event shall Sandoz or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. The exclusive remedy of the user or buyer, and the exclusive liability of Sandoz or 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 the product or, at the election of Sandoz or seller, the replacement of the product. Sandoz and seller offer this product, and buyer and user accept it, subject to the foregoing limitations of warranty and limitation of liability, which may not be modified by any oral or written agreement.

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