

Banvel

HERBICIDE

ACTIVE INGREDIENTS:

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

Dimethylamine salts of related acids 12.0%

INERT INGREDIENTS: 39.8%

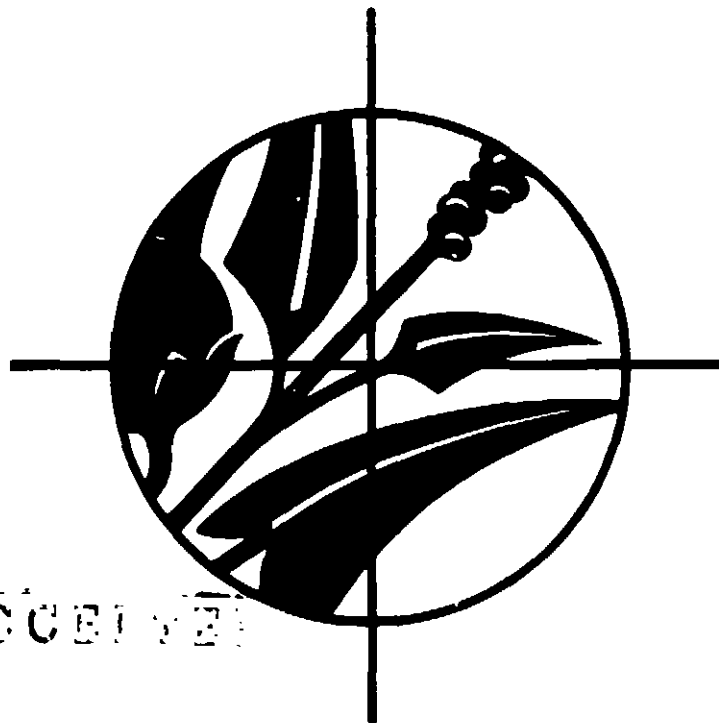
TOTAL 100.0%

*This product contains 40.0% 3,6-dichloro-o-anisic acid (dicamba) or 4 pounds per gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING

SEE BACK PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS



ACCETIVE

Reference: 5-10-77

SANDOZ CROP PROTECTION

106649 BLACK SLEEVECO

DISC 139 — File No. 01
01-18-88 cm jk Hel Reg -1, Hel Bid -2, Hel Bid Cond -4(114)
Lab No. 0038 Sandoz BANVEL-2's Gal

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

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.

ENVIRONMENTAL HAZARDS

Keep out of lakes, streams or ponds. Do not contaminate water by the cleaning of equipment or disposal of wastes. 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.

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.

For additional copies of the DIRECTIONS FOR USE Booklet, write to the manufacturer.

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.

EPA Reg. No. 55947-1
EPA Est. No. 55947-TX-1

NET CONTENTS:
2½ GALLONS (9.46 L)

ACTIVE INGREDIENT
Dimethylamine salt (3,6-dichloro-o-anisic acid)
Dimethylamine salts
INERT INGREDIENTS

*This product contains acid (dicamba) or 4 picloram

LIMITED WARRANTY AND LIABILITY

NOTICE: Read this Limited Warranty and Liability before buying or using this product. If terms are not acceptable, return it at once, unopened.

It is critical that this product be used and mixed only as specified on the label. The laws of a State may make some or all of this paragraph inapplicable or may give you rights in addition to your rights hereunder. Except to the extent prohibited by applicable law, the exclusive remedy of the user or buyer and the limit of liability of this Company or any other Seller for any and all losses, personal injuries or damages resulting from the use of this product, shall be the purchase price paid by the user or buyer for the quantity of product involved. Except to the extent prohibited by State Law, there is no warranty, and this Company and other Sellers disclaim all liability for losses, personal injury or damages: (i) arising from any use of this product in a manner or for a purpose not recommended in its label directions, or from mixing this product before use with any substance except as recommended by the product's label; (ii) arising from handling or storage in violation of label instructions; (iii) for all indirect, special or consequential damages; (iv) when not reported to this Company within one year of discovery. THERE ARE NO IMPLIED WARRANTIES AND NO WARRANTIES OF MERCHANTABILITY OR FITNESS.

0715151-10-AD

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KEEP OUT OF REACH OF CHILDREN
W/INSTRUCTIONS
SEE BACK PANEL FOR PRECAUTIONS

BEST AVAILABLE COPY

SANDOZ CROP PROTECTION

SANDOZ CROP PROTECTION CORP. 1988

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EPA Reg. No. 55947-1

THE PESTICIDE APPLICATION
MUST BE IN THE
POSSESSION OF THE
USER AT THE TIME OF

THIS LABELING MUST BE IN
THE POSSESSION OF THE
USER AT THE TIME OF

IT IS A VIOLATION OF FEDERAL
LAW TO USE THIS PRODUCT IN A
MANNER INCONSISTENT
WITH ITS LABELING.

DIRECTIONS FOR USE

HERBICIDE

Banvel®

Banvel®

HERBICIDE

THIS LABELING MUST BE IN THE
POSSESSION OF THE USER AT
THE TIME OF THE PESTICIDE
APPLICATION

NOTICE: READ "LIMIT OF
WARRANTY AND LIABILITY" ON
THE CONTAINER BEFORE
BUYING OR USING. IF TERMS
ARE NOT ACCEPTABLE, RETURN
AT ONCE UNOPENED

**USE
PESTICIDES
PROPERLY**

PROSPER WITH
PESTICIDES BY
USING THEM
PROPERLY. READ
AND FOLLOW LABEL
DIRECTIONS



SANDOZ
CROP PROTECTION
CORPORATION
CHRYSLER BUILDING

0715100-40-AD

ACCEPTED

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BEFORE USING BANVEL READ AND FOLLOW APPEARING ON

IMPORT

The following directions apply to all uses. Cautions and restrictions will be found in the directions for each use.

Do not contaminate irrigation ditches or

SENSITIVE CROP PRECAUTIONS: Do not apply BANVEL Herbicide to desirable trees and plants, particularly grapes, ornamentals, peas, potatoes, tobs and other broadleaf plants when these plants are most sensitive to BANVEL or growing stage. FOLLOW THE PRECAUTIONS FOR BANVEL HERBICIDE.

- Do not treat areas where either post-harvest surface washing may cause contact with desirable plants such as trees and shrubs.
- Avoid making applications when spray drift is likely to occur. Avoid making applications when spray drift is likely to occur. Avoid making applications when spray drift is likely to occur. Avoid making applications when spray drift is likely to occur.

- Do not apply BANVEL Herbicide in temperatures above 90°F or below 50°F.
- Do not use aerial equipment to apply BANVEL Herbicide to crops and plants are growing in the vicinity.
- To avoid injury to desirable plants, BANVEL Herbicide should be thoroughly cleaned from the spray equipment on pages 6-7) before use.

All crop uses of BANVEL Herbicide are between planting and harvest. No crop loss of treated crop has occurred. If the crops that will be plowed under, do not crop.

Crops growing under stress conditions may be more pronounced if herbicide is applied.

Consult your local or state authorities for advice concerning these and other special applications are for use only in states where they are registered.

Do not apply this product through any

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 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.

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

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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.

REFER TO THE CONTAINER LABEL FOR INSTRUCTIONS CONCERNING DISPOSAL OF WASTE AND CLEANING RINSES.

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 9) 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 SENSITIVE CROPS ARE GROWING IN THE VICINITY OF THE AREA TO BE TREATED.

Apply 5 to 50 gallons of diluted spray per treated acre when using ground application equipment, or 3 to 10 gallons of diluted spray per treated acre when using

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RON K. GRAPHIC SERVICES, LTD.
Disc 110 — File No. 02
3-17-87 cm Hel Reg -1, Hel Bold-2; (114)
Job No. 0358 Sandoz Banvel Booklet
Galley 4

RON K. GRAPHIC SERVICES, LTD.
Disc 110 — File No. 03
3-17-87 cm Hel Reg -1, Hel Bold-2; (114)
Job No. 0358 Sandoz Banvel Booklet
Galley 5

air 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.

BANVEL Herbicide should not be applied during periods of gusty wind or when wind is in excess of 15 mph as uneven spray coverage may occur.

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

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.

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast RATE per treated acre} = \text{Band RATE per treated acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME per treated acre} = \text{Band VOLUME per treated acre}$$

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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. Run the above COMPATIBILITY TEST with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer).

GENERAL WEED LIST

This is a general list of weeds which may be treated with BANVEL Herbicide in accordance with the 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

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RON K. GRAPHIC SERVICES, LTD.
Disc 110 — File No. 04
03-17-87 cm Hel Reg -1; Hel Bold-2; (114)
Job No. 0358 Sandoz Banvel Booklet
Galley 6

137.1

ANNUALS

amaranth, spiny
(spiny pigweed)
aster, slender
bedstraw
beggartweed, Florida
broomweed, common
buckwheat, wild
bullaebur
burdock, California
burdock, common
buttercup, roughseed
carpetweed
catchfly, nightflowering
chamomile, com
chickweed, common
clovers (annual)
cockle, com
cockle, cow
cocklebur, common
crotan, tropic

crotan, woolly
cucumber, wild
daisy, English
eveningprimrose,
cutleaf
fleabane, annual
goosefoot, nettleleaf
henbit
jimsonweed
knotweed
kochia
ladythumb
lambsquarters,
common
lambsquarters
(triazine resistant)
lettuce, prickly
mallow, common
mallow Venice
mayweed

morningglory, ivyleaf
morningglory, tall
mustard, tenney
mustard, wild
mustard, (yellowtops)
nightshade, black
pennycress, field
(fennel)
lanceweed,
stinkweed
pepperweed, Virginia
(peppercress)
pigweed, prostrate
pigweed, redroot
(carabaceweed)
pigweed, rough
pigweed, smooth
pigweed
(triazine resistant)
pigweed, tumble

ANNUALS (Cont'd.)

poorjoe
puncturevine
purslane, common
pursley, Florida
radish, wild
ragweed, common
ragweed, giant
(buffaloweed)
rubberweed, bitter
(bitterweed)
seaborn, hemp
shepherdspurse

sicklepod
sida, prickly
(leafweed)
smartweed, green
smartweed,
Pennsylvania
sneezeweed, bitter
sowthistle, annual
sowthistle, spiny
spikeweed, common
spurge, prostrate

spurry, com
starbur, bristly
sunflower, rough
sunflower, common
(wild)
sunflower, volunteer
thistle, Russian
velvetleaf
aster, hemp
wale-primrose, winged
yongewood, annual

BIENNIALS

burdock, common
canol, wild
(Queen Anne's lace)
cockle, white
eveningprimrose,
common
geranium, Carolina

geranium
lanceweed, diffuse
lanceweed, spotted
mallow, dwarf
plantain, bracted
ragwort, tenney
starthistle, yellow

sweetclover
teasle
thistle, bit
thistle, milk
thistle, musk
thistle, plumelike

PERENNIALS

*allata
artichoke, Jerusalem
aster, spiny
aster, white
bedstraw, smooth
bindweed, field
bindweed, hedge
blueweed, Texas
bursage
(bur ragweed)
(leafweed)
(povertyweed)
bursage, woollyleaf
(leafweed)
*buttercup, tall
campan, bladder
chickweed, field
chickweed, mouseear
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
horsetail, Carolina
ironweed
knapweed, black
knapweed, Russian
mare's tail
(horsetail)
milkweed, climbing
milkweed, common
milkweed, honeyvine
milkweed,
western whorled
nettle, stinging
nightshade, silverleaf
(white horsetail)
onion, wild
*plantain, broadleaf
*plantain, buckhorn
pokeweed
ragweed, western

redvine
smartweed, swamp
snakeweed, broom
*sorrel, red
(sheep sorrel)
sowthistle
sowthistle, perennial
spurge, leafy
sundrop, halfshrub
(eveningprimrose)
thistle, Canada
toadflax, Dalmatian
trumpet creeper
(buckvine)
velch
waterhemp
waterprimrose,
creeping
*wood-sorrel,
common yellow
wormwood, common
wormwood, Louisiana
*yarrowweed
yarrow, common

General Weed List (Cont'd)

* Noted perennials may be controlled using BANVEL Herbicide at rates lower than those recommended for other listed perennial weeds. (See application rates and timing on pages 18-21, 23, 27, 40-41 and 61-68.)

WOODY

alder
ash
aspen
basewood
beech
birch
blackberry
blackgum
cedar
cherry
chinquapin
*florwood
cr. scaberbush
cucumber tree
dewberry
dogwood
elm
grape
hawthorn (thornapple)

hemlock
hickory
honeysuckle
honeysuckle
hombam
huckleberry
hulsche
ivy, poison
kudzu
locust, black
maple
mesquite
oak
oak, poison
olive, Russian
persimmon, eastern
pine
plum, sand (wild plum)

poplar
rabbitbrush
redcedar, eastern
rose, McCarney
rose, multiflora
sagebrush, fringed
sesuvias
serviceberry
spicebush
spruce
sumac
sweetgum
sycamore
tarbush
willow
witchhazel
yaupon
yucca

FIELD, SEED*, AND SILAGE CORN IMPORTANT

Observe all precautions, mixing and application instructions on pages 4-9 as well as the following:

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

BANVEL is not registered for use on sweet corn and popcorn.

Direct chemical contact with corn seed must be avoided. If corn seeds are less than 1½ 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 1½ pints of BANVEL Herbicide per treated acre per crop year. Allow two weeks between applications of BANVEL Herbicide. See appropriate section for rate information. For combination 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.

Do not use adjuvants containing penetrants such as petroleum and crop oils after crop emergence.

Prior to the milk stage of the crop, do not harvest or graze corn for dairy or beef feed.

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Use coarse sprays to avoid potential herbicide drift. Select nozzles which are designed to produce minimal amounts of fine spray particles such as raindrops, LP 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. An agriculturally approved drift control agent may be added to further reduce the potential for drift.

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

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 2-13.)

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

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

Adding an agriculturally approved surfactant to BANVEL Herbicide will improve wild mustard, common lambsquarters, and velvetleaf control when weeds are over 5 inches tall or growing under drought stress at time of application. Tank mixing BANVEL Herbicide plus 2,4-D will improve control from a late postemergence application, but 2,4-D may cause brittleness to corn. Refer to tank mix treatments on pages 18-21.

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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. This rate also applies to soils containing greater than 8% organic matter. Use ½ pint per treated acre on coarse textured soils (sand, sandy loam, and loamy sand).

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.

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.

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EARLY POSTEMERGENCE (ALL TILLAGE SYSTEMS) (Spike to 5th true leaf stage)

BANVEL Herbicide at 1 pint per treated acre may be applied during the period from corn emergence through the 5th true leaf stage or 8 inches tall, whichever comes first. Reduce the rate to ½ pint per treated acre if the crop is beyond the 8 inch stage or growing on coarse textured soils (sand, sandy loam, loamy sand).

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

Application of BANVEL Herbicide at ½ pint per treated acre may be made from 8 to 36 inch tall corn or 15 days before leaf emergence, whichever comes first. Make direct spray application when: (1) corn leaves prevent proper spray coverage, (2) sensitive crops are growing nearby, (3) tank mixing with 2,4-D, or (4) surfactants are added to the spray mixture.

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

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OVERLAY (SEQUENTIAL) TREATMENTS

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

atrazine	Gramoxone® (paraquat)
Baston®/Ramrod (proachlor)	Lasso® (alachlor)
Bicap®	Martiaman®
Bladex® (cyanazine)	Prior® (atrazine)
Bronco®	Prowl® (pendimethalin)
Dual® (metolachlor)	Roundup® (glyphosate)
Eradicane® (EPTC)	Sutan + ®/ Genate® (butylate)
Extrazine®	

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.

RATES AND TIMINGS

BANVEL PLUS	PRE-PLANT PRE-EMERGE (NO TILLAGE CORN)	PRE-EMERGE (CONVENTIONAL OR REDUCED TILLAGE CORN)	EARLY POST EMERGENT ALL TILLAGE SYSTEMS)	LATE POST-EMER- GENT (ALL TILLAGE SYS- TEMS)	ADDITIONAL DIRECTIONS
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ATRAZINE	1 1/4-4 lbs a/A	1 1/4-4 lbs a/A	1 1/4-4 lbs a/A	1 1/4-4 lbs a/A	Application may be made before grasses are 1 1/2 inches tall
BLADIX®	1 1/4-4 lbs a/A	1 1/4-4 lbs a/A	1 1/4-2 lbs a/A (see the BWP, SBCF formula- tion only)	-	Application may be made before grasses are 1 1/2 inches tall, and before corn is beyond the 4 true leaf stage
DUAL®	-	1 1/4-3 lbs a/A (use only on fine or medium textured soils with 2 1/2% or greater organic matter)	1 1/4-3 lbs a/A	-	Application may be made after planting and until grasses reach the 2nd stage and before corn is greater than 3 inches tall

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RATES AND TIMINGS

BANVEL PLUS	PRE-PLANT PRE-EMERGE (NO TILLAGE CORN)	PRE-EMERGE (CONVENTIONAL OR REDUCED TILLAGE CORN)	EARLY POST EMERGENT ALL TILLAGE SYSTEMS)	LATE POST-EMER- GENT (ALL TILLAGE SYS- TEMS)	ADDITIONAL DIRECTIONS
ASSO®	1 1/4-4 lbs a/A (use only on fine textured soils greater than 2 1/2% org. mat- ter)	1 1/4-4 lbs a/A (use only on fine textured soils with greater than 2 1/2% or- ganic matter)	1 1/4-4 lbs a/A	-	Application may be made before grasses reach the 2nd stage and before corn is greater than 3 inches tall
PARAQUAT	1/4-1 lb a/A	1/4-1 lb a/A	-	-	Application may be made to emerged weeds but prior to corn emergence
PRINCIPAL®	2-3 lbs a/A	2-3 lbs a/A	-	-	Application may be made prior to weed and corn emergence

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PROWL®	-	1-2 lbs a/A	-	-	Application may be made immediately after planting but prior to weed and corn emergence
ROUNDUP®	1-3 lbs a/A	1-3 lbs a/A	-	-	Application may be made to emerged weeds but prior to corn emergence
24D	1/4-1/2 lbs a/A	1/4-1/2 lbs a/A	Not recom- mended	1/4 lb a/A	Drop nozzles are to be used when corn reaches the 8" growth stage. 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

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GRAIN SORGHUM (Milo)

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.
(Including the Reference To Crops Growing Under Stress)
READ AND FOLLOW MIXING AND APPLICATION
INSTRUCTIONS ON PAGES 7-8.

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.

Do not apply BANVEL Herbicide to sorghum grown for seed production.

Make no more than one application per growing season.

Delay harvest 14 days after treatment.

WEEDS CONTROLLED

BANVEL Herbicide, when applied at the recommended rate for grain 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 9-13).

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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 3 leaf stage 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 crop is taller than 6 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.)

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 lb a.i. atrazine per treated acre. For control of grasses (less than 15 inches tall), tank mix 1/2 pint BANVEL Herbicide with 2.3 lb 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). The atrazine rate will depend upon soil texture and length of residual weed control desired.

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

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OVERLAY (SEQUENTIAL) TREATMENTS

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

Herbicide	Maximum rate per treated acre (lb. a.i.)
alachlor (Lasso®)	4
(Screen®-treated seed)	
atrazine	3
metolachlor (Dual®)	2.5
(Concep®-treated seed)	
propachlor (Ramrod®)	5
propazine (Milogard®)	3.2

PREHARVEST USES

For Use Only in the States of Texas and Oklahoma

Application of BANVEL Herbicide may be made any time after the sorghum has reached the soft dough stage of development for suppression of weeds. An agriculturally approved surfactant may be used to improve performance.

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

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SMALL GRAINS (NOT UNDERSEED TO LEGUMES) IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.
READ AND FOLLOW MIXING AND APPLICATION
INSTRUCTIONS ON PAGES 7-8.

If small grains are grown for pasture only, refer to the PASTURE, RANGELAND and NON-CROPLAND section pages 37-45.

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

WEEDS CONTROLLED

BANVEL Herbicide, when applied at recommended rates, will control ANNUAL broadleaf weeds commonly found in small grains, such as:

buckwheat, wild	lady's thumb
chamomile, com	lambsquarters, common
cockle, com	mallow, common
cockle, cow	nightshade, black
cocklebur, common	pennycress, field
henbit	pigweed, redroot
knotweed	(carelessweed)
kochia	pigweed, rough

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Weed Controlled (Cont.)

pigweed, tumble
ragweed, common
ragweed, giant (buffaloweed)
smartweed, green
smartweed, Pennsylvania

sowthistle, annual
sunflower, common (wild)
sunflower, volunteer
thistle, Russian
velvetleaf

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 9-13).

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:

ridgeland (tanweed)	gromwe
caric, 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 61-66.

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RATES AND TIMINGS

Application of BANVEL Herbicide may be made before, during or after planting to emerged and actively growing weeds. See specific crop for timing restrictions. 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. Surfactant should not be used when applying BANVEL Herbicide alone or in a tank mix on small grains except when tank mixing with chlorosulfuron (Glean), metsulfuron (Ally) or Finesse.

FALL SEEDED WHEAT

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

BROADCAST RATE PER TREATED ACRE $\frac{1}{2}$ pint ($\frac{1}{8}$ lb a.i.)

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.



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BROADCAST RATE PER TREATED ACRE

Apply $\frac{1}{2}$ - $\frac{3}{4}$ pint ($\frac{1}{8}$ - $\frac{1}{4}$ lb a.i.) BANVEL Herbicide with:

Herbicide	amount product*	lb. a.i.
2,4-D	$\frac{1}{2}$ - $\frac{3}{4}$ pint	$\frac{1}{4}$ - $\frac{1}{2}$
MCPA	$\frac{1}{2}$ - $\frac{3}{4}$ pint	$\frac{1}{4}$ - $\frac{3}{8}$
bromoxynil		
(Brominal ME4,	$\frac{1}{2}$ - $\frac{3}{4}$ pint	$\frac{1}{4}$ - $\frac{3}{8}$
Buctril)	1-1 $\frac{1}{2}$ pint	$\frac{1}{4}$ - $\frac{3}{8}$
bromoxynil + MCPA		
(Bronate,	1 pint	$\frac{1}{4}$ + $\frac{1}{4}$
Bromine! Plus)	1 pint	$\frac{1}{4}$ + $\frac{1}{4}$
metsulfuron (Ally)*	$\frac{1}{4}$ wt. oz.	0.0036
metribuzin		
(Sencor® 75 DF**, Lexone® DF**)	$\frac{1}{4}$ - $\frac{1}{2}$ lb	$\frac{1}{4}$ - $\frac{1}{2}$
(Sencor® 4**, Lexone® 4L)	$\frac{1}{4}$ - $\frac{1}{2}$ pint	$\frac{1}{4}$ + $\frac{1}{4}$
(Lexone® 50WP)	$\frac{1}{4}$ - $\frac{1}{2}$ lb	$\frac{1}{4}$ - $\frac{1}{2}$
chlorosulfuron***		
(Glean® 75 DF)	$\frac{1}{4}$ - $\frac{1}{2}$ wt. oz.	0.008-0.024
diuron (Karmax® 80WP)	$\frac{1}{4}$ -2 lbs	$\frac{3}{8}$ -1 $\frac{3}{8}$
terbutryn (Igran® 80W)	1 $\frac{1}{2}$ -2 $\frac{3}{4}$ lbs	1 $\frac{1}{2}$ -2 $\frac{1}{2}$
Finesse****	0.3-0.5 wt. oz.	-

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- * Based on 4 pounds per gallon formulations of MCPA and 2,4-D.
- ** Application may be made after fall seeded wheat has started to grow and has a well established secondary root system or is beginning to tiller, but prior to the jointing stage.
- *** 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 $\frac{1}{4}$ - $\frac{1}{2}$ % by volume. Use the higher rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature weeds or dense vegetative growth.
- **** Use 0.25% surfactant per treated acre for improved control of broadleaf weeds.

SPECIAL USE TANK MIX FOR FALL SEEDED WHEAT ONLY

BANVEL	$\frac{1}{4}$ pint	$\frac{1}{8}$ lb a.i.
plus	plus	plus
2,4-D ester	1 to 2 pints	$\frac{1}{2}$ to 1 lb a.i.
or	or	or
2,4-D ester	1 to 1 $\frac{1}{2}$ pints	$\frac{1}{2}$ to $\frac{1}{4}$ lb a.i.

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

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SPRING SEEDED WHEAT

BANVEL HERBICIDE MUST BE APPLIED BEFORE SPRING SEEDED WHEAT EXCEEDS THE 5 LEAF STAGE.

BROADCAST RATE PER TREATED ACRE: $\frac{1}{4}$ pint ($\frac{1}{4}$ lb. a.i.)

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 $\frac{1}{4}$ - $\frac{1}{2}$ pint ($\frac{1}{4}$ - $\frac{1}{2}$ lb. a.i.) BANVEL Herbicide with:

Herbicide	amount product*	lb. a.i.
2,4-D	$\frac{1}{4}$ - $\frac{3}{4}$ pint	$\frac{1}{4}$ - $\frac{3}{4}$
MCPA	$\frac{1}{4}$ - $\frac{3}{4}$ pint	$\frac{1}{4}$ - $\frac{3}{4}$
bromoxynil (Brominal, Buctril)	$\frac{1}{4}$ - $\frac{3}{4}$ pint 1-1 $\frac{1}{2}$ pint	$\frac{1}{4}$ - $\frac{3}{4}$ $\frac{1}{4}$ - $\frac{3}{4}$
chlorsulfuron** (Glean® 75 DF)	$\frac{1}{4}$ - $\frac{1}{2}$ wt. oz.	0 008-0 024
Finesse®***	0 3-0 5 wt. oz.	
metasulfuron (Ally®)***	$\frac{1}{4}$ wt. oz.	0 0038

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- * Based on 4 pounds per gallon formulations of MCPA and 2,4-D.
- ** When making tank mix applications with Glean, add a surfactant of at least 80% active ingredient at the rate of 1-2 quarts per 100 gallons of spray or not more than $\frac{1}{4}$ - $\frac{1}{2}$ % by volume. Use the higher rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature weeds or dense vegetative growth.
- *** Use 0 25% surfactant per treated acre for improved control of broadleaf weeds.

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.

BROADCAST RATE PER TREATED ACRE: $\frac{1}{4}$ pint ($\frac{1}{4}$ lb. a.i.)

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.



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BROADCAST RATE PER TREATED ACRE:

Apply $\frac{1}{4}$ - $\frac{1}{2}$ pint ($\frac{1}{4}$ - $\frac{1}{2}$ lb. a.i.) BANVEL Herbicide with

Herbicide	amount product*	lb. a.i.
2,4-D	$\frac{1}{4}$ pint	$\frac{1}{4}$
MCPA	$\frac{1}{4}$ - $\frac{3}{4}$ pint	$\frac{1}{4}$ - $\frac{3}{4}$
chlorsulfuron** (Glean® 75 DF)	$\frac{1}{4}$ - $\frac{1}{2}$ wt. oz.	0 008-0 024
metasulfuron (Ally®)***	$\frac{1}{4}$ wt. oz.	0 0038
metribuzin Sencor 4 Sencor 75 DF	$\frac{1}{4}$ -1 pint $\frac{1}{4}$ - $\frac{1}{2}$ pound	$\frac{1}{4}$ - $\frac{1}{2}$ $\frac{1}{4}$ - $\frac{1}{2}$

- * Based on 4 pounds per gallon formulations of MCPA and 2,4-D.
- ** When making tank mix applications with Glean, add a surfactant of at least 80% active ingredient at the rate of 1-2 quarts per 100 gallons of spray or not more than $\frac{1}{4}$ - $\frac{1}{2}$ % by volume. Use the higher rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature weeds or dense vegetative growth.
- *** Use 0 25% surfactant per treated acre for improved control of broadleaf weeds.

SPRING SEEDED BARLEY

BANVEL HERBICIDE MUST BE APPLIED BEFORE SPRING SEEDED BARLEY EXCEEDS THE 3 LEAF STAGE.

BROADCAST RATE PER TREATED ACRE: $\frac{1}{4}$ pint ($\frac{1}{4}$ lb. a.i.)

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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 $\frac{1}{4}$ - $\frac{1}{2}$ pint ($\frac{1}{4}$ - $\frac{1}{2}$ lb. a.i.) BANVEL Herbicide with

Herbicide	amount product*	lb. a.i.
MCPA	pint	$\frac{1}{4}$
metribuzin (Sencor 4) (Sencor 75 DF)	$\frac{1}{4}$ pint $\frac{1}{4}$ pound	$\frac{1}{4}$ $\frac{1}{4}$
chlorsulfuron** (Glean® 75 DF)	$\frac{1}{4}$ - $\frac{1}{2}$ wt. oz.	0 008-0 024
metasulfuron (Ally®)***	$\frac{1}{4}$ wt. oz.	0 0038

- * Based on 4 pounds per gallon formulations of MCPA.
- ** When making tank mix applications with Glean, add a surfactant of at least 80% active ingredient at the rate of 1-2 quarts per 100 gallons of spray or not more than $\frac{1}{4}$ - $\frac{1}{2}$ % by volume. Use the higher rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature weeds or dense vegetative growth.
- *** Use 0 25% surfactant per treated acre for improved control of broadleaf weeds.

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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.

BROADCAST RATE PER TREATED ACRE: $\frac{1}{2}$ pint ($\frac{1}{2}$ lb. a.i.)

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 $\frac{1}{2}$ - $\frac{3}{4}$ pint ($\frac{1}{2}$ - $\frac{3}{4}$ lb. a.i.) BANVEL Herbicide with

Herbicide	amount product*	lb. a.i.
MCPA	$\frac{1}{2}$ - $\frac{3}{4}$ pint	$\frac{1}{2}$ - $\frac{3}{4}$

* Based on 4 pounds per gallon formulations of MCPA.

SUGARCANE IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-6.
READ AND FOLLOW MIXING AND
APPLICATION INSTRUCTIONS ON PAGES 7-8.

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 9-13).



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 & TYPE	Broadcast rate per treated acre	
	amount	lbs. a.i.
Annual		
Small, actively growing	$\frac{1}{2}$ -1 pt.	$\frac{1}{4}$ - $\frac{1}{2}$
Established weed growth	1-1 $\frac{1}{2}$ pts.	$\frac{1}{2}$ - $\frac{3}{4}$
Biennial	1-2 pts.	$\frac{1}{2}$ -1
Perennial		
Noted(*) 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®)	$\frac{3}{4}$ to 8
asulam (Asulox®)	2 to 3 $\frac{1}{2}$
atrazine	$\frac{3}{4}$ to 4
dalapon (Dalapon®)	3 $\frac{1}{2}$ to 8 $\frac{1}{2}$
2,4-D	$\frac{1}{2}$ 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), wasteland and other non-cropland areas.

IMPORTANT

**OBSERVE ALL PRECAUTIONS ON PAGES 4-5.
READ AND FOLLOW MIXING AND
APPLICATION INSTRUCTIONS ON PAGES 7-8.**

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

NEWLY SEEDED AREAS, including small grains such as barley, oats, rye or wheat grown for pasture, may be severely injured if rates of BANVEL Herbicide are applied in excess of those listed for control of ANNUAL weeds.

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.

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

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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 with water, oil-in-water emulsions (including inert systems), or sprayable fluid fertilizer as a carrier. A COMPATIBILITY TEST (page 9 of this booklet) should be made prior to tank mixing.

To prepare oil-in-water emulsions, half-fill spray tank with water plus appropriate amount of herbicide. With continuous agitation, slowly add a premix of oil (such as diesel oil or fuel oil) plus a suitable 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 5 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

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equipment being used. When using aerial equipment apply 3 to 40 gallons of diluted spray per treated acre.

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 spray to allow complete wetting (up to run-off) of foliage and stems.

ACCUTROL® Herbicide adjuvant 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 9-13.) 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.

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WEED STAGE & TYPE	Broadcast rate per treated acre	
	amount	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	1/4-1
Noted (*) Perennials	1-2 qts	1-2
Other perennials	2-4 qts	2-4
Dense stands	4-6 qts	4-6
Woody Brush & Vines		
Foliage Suppression	1/2-1 qt	1/4-1
Stems	1-2 qts	1-2
Stems and Stem Sprouts	1/2-1 gal	2-4
Stems and Root Sprouts	1-2 gals	4-6

† 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.

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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:	
atrazine	1/2 to 2
diuron (Karmex®)	4 to 48
glyphosate (Roundup®)	3/4 to 3 3/4
simezone (Princap®)	5 to 40
paraquat	1/2 to 1
trifluralin (Garlon®)	3/4 to 9
2,4-D	1/4 to 6
Rangeland and non-cropland use only:	
picloram (Tordon®)	1/4 to 3
2,4,5-T	1/4 to 6
Non-cropland use only:	
amitrole	2 to 8
atrazine (Atrac®)	4 1/2 to 40
bromacil (Hyvar®)	1 1/2 to 24
dalapon (Dalsapon®)	4 1/4 to 12 3/4
diquat	1/2
losamine ammonium (Krenite®)	6 to 12

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hexazinone (Velpar®)	2 to 12
MSMA	2
prometon (Pramitol®)	10 to 80
sulfometuron methyl (Oust™)	0.14 to 0.56
tributhiuron (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 page 9 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 as 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 the trunk. Spray or paint cut surface with the BANVEL Herbicide/water mix.

• **STUMP TREATMENTS** Spray or paint freshly cut surface with the BANVEL Herbicide/water mix. The area adjacent to the bark should be thoroughly wet.

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

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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.

MIXING AND APPLICATION

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.

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.

NOTE: To prepare oil in water emulsions, half fill spray tank with water plus appropriate amount of herbicide. With continuous agitation, slowly add a premix of oil plus a suitable emulsifier to the spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers.

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RATES AND TIMINGS

Application rates of BANVEL Herbicide are given below.

SPOT CONCENTRATE TREATMENT	
Canopy diameter (feet)	BANVEL Herbicide (ounces)
5	1/4
10	1
15	2 1/4

Do not exceed a total of 2 gallons (8 lbs. a.i.) of BANVEL Herbicide per acre per year.

LO-OIL BASAL BARK TREATMENT

Mix the appropriate amount of BANVEL Herbicide with the appropriate amount of water, emulsifier and No. 2 diesel fuel to obtain the volume of spray desired. See table below. Refer to MIXING and APPLICATION section before mixing. Do not exceed 30 gallons of spray solution per acre per year.

Ounces				
Volume of spray solution desired (gal.)	Water	Emulsifier	Banvel Herbicide	No. 2 Diesel Fuel
1	100* (3 qts.)	1/2	8	20
2	200 (6 qts.)	1	16	40
5	500 (3 7/8 qts.)	2 1/2	40	100
10	1000 (7 1/2 qts.)	5	80	200

*Conversion: 100 ounces = 3 quarts

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CONSERVATION RESERVE PROGRAM (CRP) ACRES

IMPORTANT

Newly Seeded Areas - Seeding grasses or small grains such as barley, oats, rye, wheat, or other grass species grown as a cover crop may be severely injured if rates of BANVEL Herbicide are applied in excess of those listed for control of ANNUAL weeds. DO NOT APPLY BANVEL HERBICIDE TO SEEDLING GRASSES UNTIL GRASSES EXCEED THE THREE-LEAF STAGE OF GROWTH.

Established grass stands growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Bentgrass, carpetgrass, smooth crabgrass, buffalograss and St. Augustine grass may be injured at rates exceeding 1 pint of BANVEL Herbicide (0.5 lb a.i.) per treated acre. Depending on the rate used, treatment with BANVEL Herbicide will injure or kill alfalfa, clovers, lespedeza, wild winter peas, vetch or other legumes.

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 9) should be made prior to tank mixing.

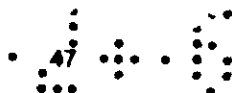
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To prepare oil in water emulsions, half-fill the spray tank with water plus the appropriate amount of herbicide. With continuous agitation, slowly add a premix of oil (such as diesel oil or fuel oil) plus a suitable emulsifier to the spray tank. Complete 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 equipment. When using ground equipment, apply 5-50 gallons of diluted spray per treated acre. The volume of spray applied will depend on the height, density, and types of weeds being treated and the type of equipment being used. When using aerial equipment, apply 3-10 gallons of diluted spray per treated acre.

BANVEL Herbicide may be applied to individual clumps or small areas (SPOT TREATMENT) of weeds using a handgun or similar application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems.

Agriculturally approved drift-reducing additives or surfactants may be used. If spray additives are used, read and follow all use recommendations and precautions on product label. Do not use adjuvants containing penetrants such as petroleum and crop oils after cover crop emergence.



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DIRECTIONS FOR USE

BANVEL Herbicide, when applied at recommended rates, will control many annual and biennial weeds and provide top growth control of many perennial weeds. Many of the key broadleaf weed species controlled or suppressed (perennials) are listed below.

For perennial broadleaf suppression in established grass or in the fallow (stubble) or cover crop period prior to seeding a grass crop, apply 1 quart (1 lb a.i.) of BANVEL Herbicide per treated acre. Established grass is defined as: Grass that is treated the season after planting.

ANNUAL WEEDS CONTROLLED

buckwheel, wild	mallow, common
chamomile, corn	nightshade, black
cockle, corn	perovskia, field
cockle, cow	pigweed, redroot
cocklebur, common	pigweed, rough
henbit	pigweed, tumble
knottweed	ragweed, common
kochia	ragweed, giant
ladythumb	(buffalo-weed)
lambsquarters, common	smartweed, green

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smartweed, Pennsylvania	sunflower, volunteer
soybean, annual	thistle, Russian
sunflower, common (wild)	velvetleaf

BIENNIAL WEEDS CONTROLLED

knopweed, diffuse	thistle, bull
knopweed, spotted	thistle, musk
starthistle, yellow	thistle, plumless
sweetclover	

PERENNIALS (SUPPRESSION OR TOP GROWTH CONTROL)

alfalfa (volunteer)	garlic, wild
artichoke, Jerusalem	horseshoe, Carolina
bindweed, field	knopweed, Russian
bindweed, hedge	nightshade, silverleaf
blueweed, Texas	redvine
bursage	smartweed, swamp
(bur ragwort)	spurge, leafy
(poverty-weed)	sowthistle, perennial
(larkweed)	thistle, Canada
dandelion, corn on	trumpetcrane
dock, curly	(buckvine)
dogbane, hemp	

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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.

The addition of an agriculturally approved surfactant will improve wetting and coverage of weed foliage and improve control of drought stressed weeds.

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	1/4 to 1/2
- Established weed growth	1	1/2
Biennials*		
- Rosette diameter		
a) less than 3 inches	1/4 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

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* 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 lbs a.i.) of BANVEL Herbicide per treated acre during a growing season.

* Biennial and Perennial weeds will require follow-up (sequential) treatments for seedling control and escapes.

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 or additional broadleaf weeds:



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Tank Mix Herbicide	Rate Per Treated Acre (lbs a.i.)
Atrazine*	1/2 to 2
chlorsulfuron (Glean 75DF)**	0.008 to 0.024
Glyphosate (Roundup)*	1/2 to 2
2,4-D	1/4 to 6
metasulfuron (Ally)***	0.0038
Paraquat*	1/2 to 1

* Preplant application

** 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.

*** Use 0.25% surfactant per treated acre for improved control of broadleaf weeds.

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CAUTION

When used as a preplant application for control of existing weeds, allow 45 days per pint of BANVEL Herbicide applied per acre before seeding grass west of the Mississippi River, or 20 days per pint east of the Mississippi River. Exclude days when the ground is frozen. Do not apply prior to planting of grass-legume mixtures.

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ASPARAGUS

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

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.
READ AND FOLLOW MIXING AND
APPLICATION INSTRUCTIONS ON PAGES 7-8.

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.

Make only one application per season.

RATES AND TIMINGS

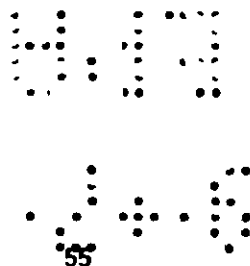
Apply BANVEL Herbicide to emerged and actively growing weeds in 40 to 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting.

WEEDS	Rate Per Treated Acre
mustard, black pigweed, redroot (carelessweed) sowthistle, annual *thistle, Canada thistle, Russian	$\frac{1}{2}$ to 1 pt ($\frac{1}{4}$ - $\frac{1}{2}$ lb a.i.)

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*bindweed, field chickweed, common goosefoot, noddleleaf radish, wild thistle, milk	1 pt ($\frac{1}{2}$ lb a.i.)
---	----------------------------------

BANVEL Herbicide plus 2,4-D herbicide tank-mixture may be used for improved control of noted (*) weeds. READ AND FOLLOW 2,4-D PRODUCT LABELING FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS, AND OTHER RESTRICTIONS.



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ISC 110 — File No 29
3-19-87 cm Hel Reg -1, Hel Bold 2, (114)
Job No 0358 Sandoz Banvel Booklet
alley 33

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TURF AND LAWNS

Including Golf Course Fairways, Aprons, Tees and Rough.

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.
READ AND FOLLOW MIXING AND
APPLICATION INSTRUCTIONS ON PAGES 7-8.

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 ($\frac{1}{2}$ 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 $\frac{1}{4}$ pint ($\frac{1}{4}$ lb a.i.) of BANVEL Herbicide per treated acre on coarse textured (sandy-type) soils, or in excess of $\frac{1}{2}$ pint ($\frac{1}{2}$ 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 9-13.)

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MIXING AND APPLICATION

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

RATES AND TIMINGS

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

WEED STAGE & TYPE	BANVEL Herbicide		
	pints per treated acre	lbs. a.i. per treated acre	teaspoons per 1000 sq. ft.
Annual			
Small, actively growing	$\frac{1}{2}$ -1	$\frac{1}{4}$ - $\frac{1}{2}$	1-2 $\frac{1}{4}$
Established weed growth	1-1 $\frac{1}{2}$	$\frac{1}{2}$ - $\frac{3}{4}$	2 $\frac{1}{4}$ -3 $\frac{1}{4}$
Biennial			
Rosette diameter			
Less than 3 inches	$\frac{1}{2}$ -1	$\frac{1}{4}$ - $\frac{1}{2}$	1-2 $\frac{1}{4}$
3 inches or more	1-2	$\frac{1}{2}$ -1	2 $\frac{1}{4}$ -4 $\frac{1}{4}$
Perennials and Woody			
Brush and Vines	1-2	$\frac{1}{2}$ -1	2 $\frac{1}{4}$ -4 $\frac{1}{4}$

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.

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Job No 0358 Sandoz Banvel Booklet
alley 35

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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 $\frac{1}{4}$ to $\frac{1}{2}$ pint ($\frac{1}{4}$ - $\frac{1}{2}$ lb. a.i.) of BANVEL Herbicide per treated acre with $\frac{1}{2}$ to $1\frac{1}{2}$ lbs. acid equivalent of 2,4-D, MCPA, or MCPP, or with $\frac{1}{4}$ to $\frac{1}{2}$ 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

Perennial Grasses such as Bermuda grass, Bluegrass, Lawntype Fescue and Ryegrass

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.
READ AND FOLLOW MIXING AND
APPLICATION INSTRUCTIONS ON PAGES 7-8.

Refer to the PASTURE, RANGELAND, AND NON-CROPLAND IMPORTANT section (pages 38-39) for possible grazing and feeding restrictions.

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

RATES AND TIMINGS

Apply $\frac{1}{4}$ to 2 pints ($\frac{1}{4}$ -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	chickweed, mouseear	knockweed
bindweed, field	clover	*somal, red (sheep sorrel)
catchfly, nightflowering	cytise* white	starwort, little
chamomile, corn	dock, curly	*thistle, Canada
chickweed, common	*knapsack, Russian	

*Top growth control only

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Use $\frac{1}{2}$ to 1 pint ($\frac{1}{4}$ - $\frac{1}{2}$ 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.

For control of ANNUAL GRASS WEEDS such as:

brome, downy (cheatgrass)
brome, riggus
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 within 3-14 days following first irrigation and before weeds have more than 2 leaves.

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BETWEEN CROPPING APPLICATIONS (BCA) FOR BROADLEAF WEED CONTROL IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.
READ AND FOLLOW MIXING AND
APPLICATION INSTRUCTIONS ON PAGES 7-8.

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 9-13) In addition, BANVEL Herbicide will control the following PERENNIAL broadleaf weeds:

*alfalfa	*dandelion, common	redvine
*artichoke, Jerusalem	*dock, curly	smartweed, swamp
bindweed, field	dogbane, hemp	*sowthistle, perennial
bindweed, hedge	garlic, wild**	thistle, Canada**
blueweed, Texas	horseshoe, Carolina	trumpet creeper
*bursage	nightshade, silverleaf	(huckleberry)
(bur ragweed)		
(povertyweed)		
(sheepweed)		

Noted(*) perennials may be controlled using BANVEL Herbicide at rates lower than those recommended for other listed perennial weeds. (See RATES AND TIMINGS, pages 62-63)

**SPECIAL TANK MIX TREATMENTS, pages 64-65, for specific control program

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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 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 is 8 inches or taller. Viny 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 bulbils, after the effective period for BANVEL Herbicide. For seedling control, a follow-up program or other cultural practices could be instituted (refer to pages 14-21, 22-24, 25-31, for corn, sorghum, and wheat in-crop uses of BANVEL Herbicide).

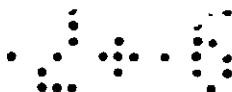
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WEED STAGE & TYPE	BANVEL Herbicide per treated acre	
	amount	lbs. a.i.
Annual	1/2-1 pt.	1/4-1/2
Biennial	1-2 pts.	1/2-1
Perennial		
Perennial suppression	1-2 pts.	1/2-1
Noted (*) perennials	2-4 pts.	1-2
Other perennials	4 pts.	2

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.

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.



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

*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.

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For Canada thistle control, use BANVEL Herbicide or BANVEL 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 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.

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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 specified.

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 20 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 4-5.
READ AND FOLLOW MIXING AND
APPLICATION INSTRUCTIONS ON PAGES 7-8.

Do not treat submerged 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	dock, curly	ragwort, tansy
dock, broadleaf	knapsweed, black	spurge, leafy
(bitterdock)	knapsweed, Russian	thistle, Canada

RATES AND TIMINGS

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

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Apply 4 to 8 quarts (4-8 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.

WIPER APPLICATION USES IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.

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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REGISTERED TRADEMARKS

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24 (c) SPECIAL LOCAL NEED LABELING

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RON K. GRAPHIC SERVICES, LTD.
DISC 131 — File No. 07
04-21-87 Id Hel. Reg.-1; Hel. Bold-2; (114)
Job No. 0358 Sandoz Barvel Booklet
Galley 6

RON K. GRAPHIC SERVICES, LTD.

Job No. 880600-0672 Sandoz Barvel Booklet
Galley 32

**24 (c) SPECIAL LOCAL NEED LABELING
SMALL GRAINS
AERIAL APPLICATION**

For Use Only in the States of
Colorado, Montana, Wyoming,
North Dakota and South Dakota

EPA SLN Nos.
CO-880006 ND-870009
MT-790004 SD-870001
WY-870002

Refer to the SMALL GRAINS section of this label (pages 25-34) for
DIRECTIONS FOR USE information.

BANVEL Herbicide may be applied using 1-5 gallons of diluted spray per treated
acre when using aerial application equipment in the above listed states only

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**24(c) SPECIAL LOCAL NEED LABELING
WILD BUCKWHEAT CONTROL IN
FALL SEEDED WHEAT**

For Use Only Within the State of Oklahoma
EPA SLN No. OK-810004

IMPORTANT

**OBSERVE ALL RESTRICTIONS AND PRECAUTIONS
AND APPLICATION DIRECTIONS ON PAGES 4-6**

TIMING OF APPLICATION: Application of BANVEL Herbicide tank mixtures
given below can be made on wheat up to the development of a second node. Ap-
ply this mixture after the wild buckwheat has emerged and is actively growing.
For good control apply before wild buckwheat plants are larger than two true
leaves. Spray before a crop canopy is formed which will protect the weeds
from the spray.

TANK MIX TREATMENTS: Tank mix 1/4 pound active (1/4) pint of BANVEL Her-
bicide with 1/4 pound active Bromoxynil plus 1/4 pound active MCPA or with 1/4
pound active Bromoxynil per treated acre. Bromoxynil plus MCPA is sold as Bro-
nate® (trademark of Rhone-Poulenc, Inc.) or Brominal® Plus (trademark of
Union Carbide Corp.). Bromoxynil is available as Brominal® (trademark of Union
Carbide Corp.) or Buctril® (trademark of Rhone-Poulenc, Inc.). Read and follow
all applicable directions, restrictions, and precautions on the Bromoxynil and
MCPA labels.

Dilute with water a minimum of 3 gallons total spray per acre for aerial applica-
tion and a minimum of 10 gallons total spray for ground application.

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**24(c) SPECIAL LOCAL NEED LABELING
ANNUAL WEED CONTROL IN MILLET**

For Use Only
within the State of Nebraska
EPA SLN No. NE-830009

IMPORTANT
OBSERVE ALL PRECAUTIONS ON PAGES 4-5.

WEEDS CONTROLLED

ANNUALS		
buckwheat, tartary	mallow, common	ragweed, common
buckwheat, wild	mayweed	ragweed, giant
carpetweed	mustard, annuals	(buffaloweed)
chamomile, com	mustard, tartary	sealife (goatsbeard)
chickweed, common	nightshade, black	shepherdspurs
cockle, corn	pennycress, field	smartweed, green
cockle, cow	(lamweed)	smartweed,
cocklebur, common	henchweed,	Pennsylvania
dragonhead, American	stinkweed)	sowthistle, annual
hempsettle	pigweed, redroot	starthistle, yellow
kruwel (German Moss)	(carleweed)	sunflower, common
knockweed	pigweed, rough	(wild)
kochia	pigweed, tumble	sunflower, volunteer
ladythumb	pineappleweed	thistle, Russian
lambsquarters,	puncturevine	velvetleaf
common	purslane, common	veich
lettuce, prickly	radish, wild	

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APPLICATION DIRECTIONS

Apply BANVEL Herbicide as a broadcast or spot treatment to emerged and ac-
tively growing weeds and when millet is in the 2 to 5 leaf stage.

For control of listed Annual broadleaf weeds, apply 1/4 pint BANVEL Herbicide
(1/4 lb. a.i.) with 1/4 a.i. 2,4-D.

5 to 50 gallons of diluted spray per treated acre may be applied when using
ground application equipment, or 3 to 10 gallons of diluted spray per treated acre
when using aerial application equipment.

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**24(c) SPECIAL LOCAL NEED LABELING
FOR CONTROL OF ANNUAL AND PERENNIAL BROADLEAF
WEEDS SUCH AS FIELD BINDWEED IN BETWEEN CROPPING
APPLICATIONS TO WHEAT**

For Use Only in the State of Oklahoma
EPA SLN No. OK-850008

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.

Also read and follow the Tordon 22K federal label and 24-C label for precautionary statements, directions for use, geographic and other restrictions.

Observe the following requirements:

- Do not make application more than once each calendar year
- Do not apply on or in the vicinity of susceptible crops or desirable plants including alfalfa, beans, grapes, melons, peas, potatoes, safflower, soybeans, sugar beets, sunflower, tomatoes and other vegetable crops, flowers, fruit plants, ornamentals, shade trees, or the soil containing roots of nearby valuable plants.
- Do not apply by air. For ground equipment do not apply with hollow cone-type insecticide or other nozzles that produce fine-droplet spray.
- Do not contaminate water intended for irrigation or domestic purposes. Do not treat or allow spray drift to fall onto innerbanks or bottom of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation purposes.

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- Do not move treated soil to other areas where susceptible desirable plants may be exposed and damaged while phytotoxic residues are present
- Avoid spray drift. Applications should be made only when there is no hazard from spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods.

RATES AND TIMINGS

Use BANVEL Herbicide plus Tordon 22K by ground application to control or reduce infestations of broadleaf annual and perennial weeds such as field bindweed on grainland during the period following crop harvest and prior to planting winter wheat. For reduction of perennial weeds such as field bindweed, broadcast treat infested areas using 0.5 to 1.0 pint of BANVEL Herbicide tank mixed with 0.5 to 1.0 pint of Tordon 22K in 10 or more gallons of water per acre. For best results, treat in June or July during a fallow period or following small grain harvest, applying the 1.0 pint plus 1.0 pint rate of BANVEL Herbicide and Tordon 22K. Initial treatment alternatively may be made during a fallow period after harvesting a fall maturing crop such as grain sorghum or corn. During the next calendar year, retreat the same area with BANVEL plus Tordon 22K, preferably in May or June in the fallow period prior to fall planting of the next wheat crop. An alternative application of BANVEL Herbicide without Tordon 22K may be made in the late summer or fall during the fallow period prior to fall wheat planting. For specific rates for the use of BANVEL Herbicide, see the BANVEL Herbicide Directions for Use booklet attached to the container. Avoid disturbing treated areas for at least 7 days following application. For seedling control a follow-up program or other cultural practices should be instituted.

Wheat may be injured when planted at varying periods following applications of Tordon 22K and BANVEL Herbicide. Do not use the BANVEL plus Tordon 22K tank mix if risk of injury to wheat cannot be tolerated.

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**24(c) SPECIAL LOCAL NEED LABELING
FOR CONTROL OF ANNUAL AND PERENNIAL BROADLEAF
WEEDS SUCH AS FIELD BINDWEED IN BETWEEN CROPPING
APPLICATIONS TO WHEAT**

For Use Only in the State of Texas
EPA SLN No. TX-860006

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES 4-5.

Also read and follow the Tordon 22K federal label and 24-C label for precautionary statements, directions for use, geographic and other restrictions.

Observe the following requirements:

- Do not make application more than once each calendar year.
- Do not apply on or in the vicinity of susceptible crops or desirable plants including alfalfa, beans, grapes, melons, peas, potatoes, safflower, soybeans, sugar beets, sunflower, tomatoes and other vegetable crops, flowers, fruit plants, ornamentals, shade trees, or the soil containing roots of nearby valuable plants.
- Do not apply by air. For ground equipment do not apply with hollow cone-type insecticide or other nozzles that produce fine-droplet spray.
- Do not contaminate water intended for irrigation or domestic purposes. Do not treat or allow spray drift to fall onto innerbanks or bottom of irrigation ditches, either dry or containing water or other channels that carry water that may be used for irrigation purposes.
- Do not move treated soil to other areas where susceptible desirable plants may be exposed and damaged while phytotoxic residues are present

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- Avoid spray drift. Applications should be made only when there is no hazard from spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods.
- Do not apply in the vicinity of sensitive crops when the temperature on the day of application is expected to exceed 85 degrees.

RATES AND TIMINGS

Use BANVEL Herbicide plus Tordon 22K by ground application to control or reduce infestations of broadleaf annual and perennial weeds such as field bindweed on grainland during the period following crop harvest and prior to planting winter wheat. For reduction of perennial weeds such as field bindweed, broadcast treat infested areas using 0.5 to 1.0 pint of BANVEL Herbicide tank mixed with 0.5 to 1.0 pint of Tordon 22K in 10 or more gallons of water per acre. For best results, treat in June or July during a fallow period or following small grain harvest, applying the 1.0 pint plus 1.0 pint rate of BANVEL Herbicide and Tordon 22K. Initial treatment alternatively may be made during a fallow period after harvesting a fall maturing crop such as grain sorghum or corn. During the next calendar year, retreat the same area with BANVEL plus Tordon 22K, preferably in May or June in the fallow period prior to fall planting of the next wheat crop. An alternative application of BANVEL Herbicide without Tordon 22K may be made in the late summer or fall during the fallow period prior to fall wheat planting. For specific rates for the use of BANVEL Herbicide, see the BANVEL Herbicide Directions for Use booklet attached to the container. Avoid disturbing treated areas for at least 7 days following application. For seedling control a follow-up program or other cultural practices should be instituted.

Wheat may be injured when planted at varying periods following applications of Tordon 22K and BANVEL Herbicide. Do not use the BANVEL plus Tordon 22K tank mix if risk of injury to wheat cannot be tolerated.

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