

**VELSICOL**<sup>®</sup>

# Banvel 4-S

## HERBICIDE

FOR COMMERCIAL USE ONLY

**ACTIVE INGREDIENTS:**

Dimethylamine salt of dicamba (3,6-dichloro- <i>p</i> -anisic acid)*	48.2%
Dimethylamine Salts of related acids	12.0%
<b>INERT INGREDIENTS</b>	<b>39.8%</b>
<b>TOTAL</b>	<b>100.0%</b>

\*Equivalent to 40.0% 3,6-dichloro-*p*-anisic acid (dicamba) or 4 pounds per gallon.

EPA REG. NO 876-37-AA  
EPA EST NO 876-TX-2

**Net Contents:**  
**2½ Gallons**

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

See back panel for additional caution statements

VELSICOL CHEMICAL CORPORATION  
341 E. OHIO ST., CHICAGO, ILL. 60611

ACCEPTED

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## DIRECTIONS FOR USE

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

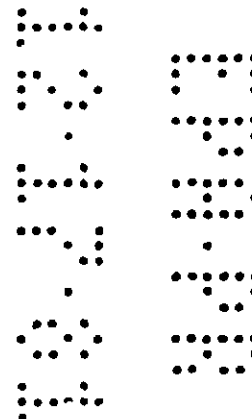
Refer to the DIRECTIONS FOR USE Booklet attached to this container for proper use directions and additional precautionary statements.

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

### 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, and (v) arising from product not used within the label-designated shelf life or four years from the date of purchase, whichever first occurs. **THERE ARE NO IMPLIED WARRANTIES AND NO WARRANTIES OF MERCHANTABILITY OR FITNESS.**



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Harmful if swallowed. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. 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.

**STORAGE AND DISPOSAL**

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

**PESTICIDE DISPOSAL**

Pesticide, spray mixture or residue that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures under the Resource Conservation and Recovery Act.

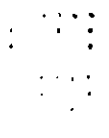
**CONTAINER DISPOSAL:**

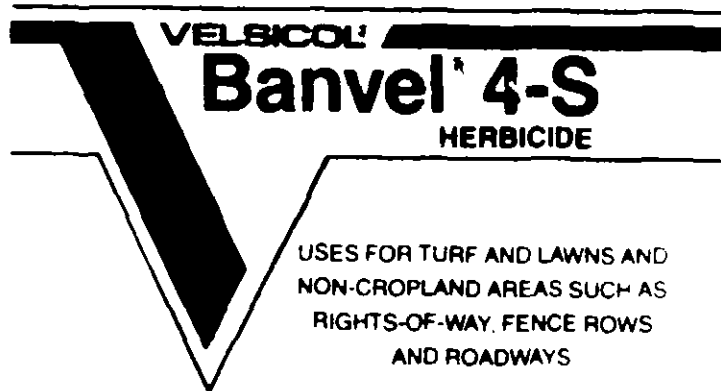
**Metal**

Triple rinse (or equivalent) and offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by other approved State and local procedures.

**Plastic**

Triple rinse (or equivalent) and offer for recycling or reconditioning, or dispose of in a sanitary landfill or by incineration if permitted by State and local authorities.





USES FOR TURF AND LAWNS AND  
NON-CROPLAND AREAS SUCH AS  
RIGHTS-OF-WAY, FENCE ROWS  
AND ROADWAYS

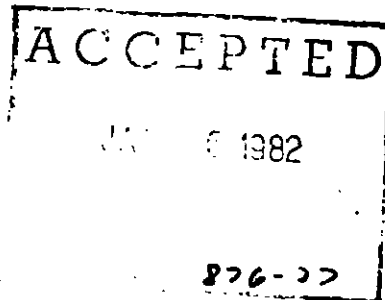
**DIRECTIONS FOR USE**

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

EPA Reg No 876-37-AA

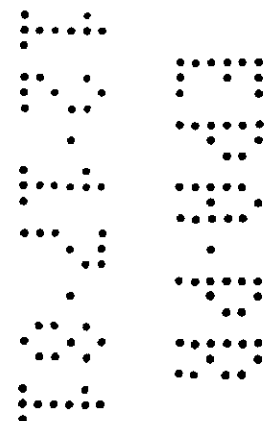
THIS LABELING MUST BE IN THE POSSESSION OF  
THE USER AT THE TIME OF PESTICIDE APPLICATION

VELBICOL CHEMICAL CORPORATION 1981



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BEFORE USING BANVEL 4-S HERBICIDE  
READ AND FOLLOW THE PRECAUTIONS  
APPEARING ON THE CONTAINER

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### IMPORTANT

Do not contaminate irrigation ditches or water used for domestic purposes.

BANVEL 4-S may cause injury to desirable trees or 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. Plants are most sensitive to BANVEL 4-S during their development or growing stage. Follow the precautions listed below when using BANVEL 4-S.

- Do not apply to areas where the possible downward soil movement or surface washing may cause contact of BANVEL 4-S with the roots of desirable plants, such as trees and shrubs.

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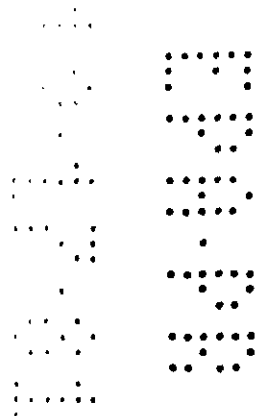
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Always make applications when there is some air movement to determine the direction and distance of possible spray drift. Leave an adequate buffer zone between area to be treated and sensitive plants. Course sprays are less likely to drift out of target area. Drift reducing additives such as NALCO-TROL™ (Trademark of NALCO CHEMICAL COMPANY) may be used.

- To avoid injury to desirable plants, equipment used for BANVEL 4-S should be thoroughly cleaned (see Procedure for Cleaning Spray Equipment on pages 4 and 5 of this label) before reuse with other chemicals.

Application of BANVEL 4-S to newly seeded grasses 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. Treatments will hurt or injure alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

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

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## PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The equipment used for mixing and application of BANVEL 4-S should be thoroughly cleaned prior to reuse for mixing and application of other pesticides. BANVEL 4-S left in the equipment can contaminate other pesticide applications and cause injury to sensitive crops.

The steps listed below are suggested for thorough cleaning of spray equipment following applications of BANVEL 4-S or tank mixtures with other water soluble products such as 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 hose 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 spray tank through the boom.

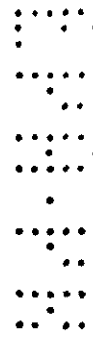
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4. Remove the nozzles and screens and flush the system with two full tanks of water.

The steps listed below are suggested for thorough cleaning of spray equipment used to apply BANVEL 4-S as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water dispersible formulations. 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 followed by steps 2, 3, and 4.

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



### COMPATIBILITY TEST

It is advisable that a compatibility test be made whereby all components of the finished spray are mixed in proportionate quantities (see following table) in a small container before mixing in spray tank.

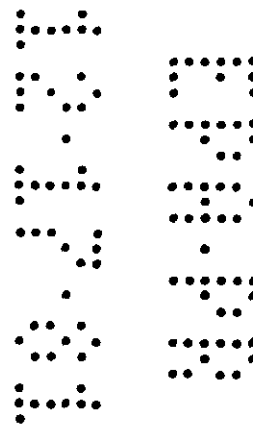
Amount of Herbicide to Add to One Pint of Spray Carrier (Assuming Volume is 25 Gallons Acre)

HERBICIDE	RATE ACRE	LEVEL TEASPOONS
Wettable		
Powders	1 pound	1
	2 pounds	3
	4 pounds	6
Liquid		
Formulations	1 pint	1
	1 quart	2
	1 gallon	4

The amount of herbicide to be tested in the above table is based on 25 gallons of finished spray per treated acre. When using lower or higher spray volumes make appropriate changes in the ingredients of the compatibility test.

If herbicides 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 five minutes after mixing.

If incompatibility occurs, the use of a compatibility agent such as Compex<sup>®</sup> (Trademark of KALO LABORATORIES) is recommended. Rerun the above Compatibility Test with a suitable compatibility agent (1/2 teaspoon is equivalent to 2 pints per 100 gallons of spray solution).



## MIXING

BANVEL 4-S is a water soluble formulation which requires no special mixing instructions. However, when tank mixing with other pesticides, read and follow the instructions on the label of all products used concerning mixing and application.

BANVEL 4-S can be applied using water or sprayable fluid fertilizer as a carrier. A compatibility test (see COMPATIBILITY TEST on pages 6 and 7 of this label) should be made prior to tank mixing. Apply 30 to 200 gallons of diluted spray per treated acre, depending on density and height of weeds treated and the type of equipment used.

Spray additives may be used for wetting, penetration, or drift control. A surfactant such as ACCUTROL\* or X-77\* (Trade mark of KALO LABORATORIES) may be used to enhance activity while NALCO-TROL\* (Trademark of NALCO CHEMICAL COMPANY) may be used to aid in reducing spray drift. If spray additives are used, read and follow all use recommendations and precautions on product label.

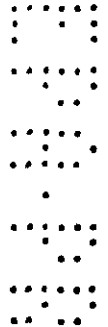
The following RATE CONVERSION TABLE may be used to aid in preparing spray mixture for treating small areas. Mix the EQUIVALENT RATE for size area to be treated with appropriate volume of spray carrier required to spray area.

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LABEL RATE* PER ACRE (Pints)	EQUIVALENT RATE PER		
	4500 sq ft	900 sq ft	450 sq ft
	(TEASPOONS)		
1/4 pt/a	2	1	1/2
1/2 pt/a	5	1	1/2
1 pt/a	10	2	1
2 (1 lb a.i.)	20	4	2

\*Select LABEL RATE from APPLICATION RATES AND TIMINGS sections of this label. For turf and lawn uses refer to pages 16-18 and for non-cropland uses refer to pages 20-23. When using higher LABEL RATES than those given in this table, increase EQUIVALENT RATE proportionately.

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## WEEDS CONTROLLED

Barvel 4-S when applied in accordance with this label 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	pepperweed Virginia
aster slender	pigweed redroot (carelessweed)
broomweed common	pigweed tumble
buckwheat	poonoe
buffalobur	puncturevine
burclover California	purslane common
buttercup roughseed	ragweed common
carpetweed	ragweed giant
catchfly nightflowering	rubberweed bitter (bitenweed)
chamomile com	sesbania hemp
chickweed common	shepherdspurse
clover (annual)	sida prickly leafweed
cockle corn	smartweed green
cockle cow	smartweed Pennsylvania
cocklebur common	sneezeweed bitter
croton woolly	sowthistle annual
daisy English	

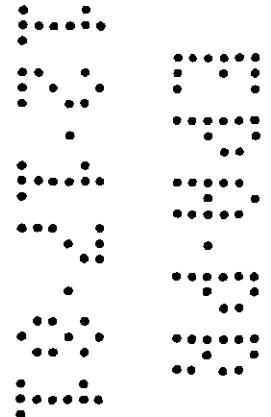
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eveningprimrose cutleaf	sowthistle spiny
feabane annual	spanishneedles
henbit	spikeweed common
knawe (German moss)	spurge prostrate
knawweed	spurry corn
kochia	sumpweed rough
lambquarters common	sunflower common
mayweed	thistle Russian
momingglory ivyleaf	velvetleaf
momingglory fall	waterhemp
mustards (yellowtops)	waterprimrose winged
pennycress field	wormwood annual

### BIENNIALS

burdock common	plantain bracted
carrot wild (Queen Anne's Lace)	ragwort tansy
cockle white	starthistle yellow
eveningprimrose common	sweetclover
geranium Carolina	teasel
knawweed diffuse	thistle bull
knawweed spotted	thistle musk
mallow dwarf	thistle plumeless

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WEEDS CONTROLLED (continued)

PERENNIALS

*alfalfa	knapweed black
aster spiny	knapweed Russian
aster whitehead	lespedeza
bedstraw smooth	lupine silvery
bindweed field	mare's tail (horseweed)
bindweed hedge	milkweed climbing
bindweed Texas	milkweed common
bursage skeletonleaf	milkweed western white
but ragweed povertyweed:	nettle stinging
bursage woollyleaf	nightshade silverleaf
flakeweed:	onion wild
*buttercup tall	*plantain buckhorn
campion bladder	*plantain broadleaf
chicory	pokeweed
chickweed field	ragweed western
chickweed mouseear:	redvine
*clover hop	smartweed swamf
cress hoary (whitetop):	snakeweed broom
*dandelion common	*sorrel red sheep scurf
dock curly	spurge leafy
dogbane hemp	sundrop halfshrub
*dogfennel (cypressweed):	eveningprimrose
eupatorium late	thistle Canada
(thoroughwort)	toadflax Dalmatian
fern bracken	vetch
garlic wild	waterhemlock
goldenrod Canada	waterprimrose creeping
goldenrod Missouri	*woodsorrel common yellow
goldenweed common	wormwood common
hawkweed	wormwood Louisiana
horsetail Carolina	*yarrowweed
ironweed	yarrow common

\*Noted weeds may be controlled using lower rates of BANVEL 4-S (see APPLICATION RATES AND TIMINGS on pages 16-18 and 20-23 of this label)



WEEDS CONTROLLED (continued)

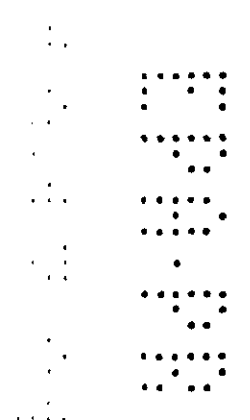
WOODY

alder	mesquite
ash	oak poison
aspen	oak
basswood	persimmon eastern
beech	peppertree Brazil
birch	(Florida holly Schinus)
blackberry	pine
blackgum	plum sand (wild plum)
cedar	poplar
cherry	rabbitbrush
chinquapin	redcedar eastern
condalia (olebush) (ole)	rose McCartney
cottonwood	rose multiflora
creosotebush	sagebrush fringed
cucumber tree	sassafras
dewberry	serviceberry
dogwood	snowberry western
elm	(buckbrush)
grape	spicebush
guava	spruce
hawthorn (thornapple)	sweetgum
hemlock	sumac

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hickory	sycamore
honeysuckle	tarbush
honeylocust	trumpet creeper (buckvine)
hackberry	waxmyrtle
husache	willow
ivy poison	witchhazel
kudzu	yaupon
locust black	yucca
maple	
metaleuca	

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## FOR ORNAMENTAL TURF AND LAWNS

### APPLICATION RATES AND TIMINGS

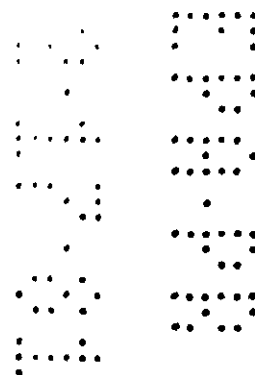
Application rates and timings for BANVEL 4-S use on ornamental turf and lawns, including golf course fairways, aprons, tees and rough are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

- For control of listed ANNUAL broadleaf weeds, apply  $\frac{1}{2}$  to 1 pint ( $\frac{1}{4}$  to  $\frac{1}{2}$  lb a.i.) per treated acre of BANVEL 4-S when weeds are small and actively growing. Apply 1 to  $1\frac{1}{2}$  pints ( $\frac{1}{2}$  to  $\frac{3}{4}$  lb a.i.) per treated acre when treating established weed growth.
- For control of listed BIENNIAL broadleaf weeds, apply  $\frac{1}{2}$  to 1 pint ( $\frac{1}{4}$  to  $\frac{1}{2}$  lb a.i.) per treated acre of BANVEL 4-S when rosettes (first year growth) are less than 3 inches in diameter. Apply 1 to 2 pints ( $\frac{1}{2}$  to 1 lb a.i.) per treated acre when rosettes are 3 inches or more in diameter. For best performance, make application when BIENNIAL weeds are in the rosette stage.
- For control of noted (\*) PERENNIAL broadleaf weeds, apply 1 to 2 pints ( $\frac{1}{2}$  to 1 lb a.i.) per treated acre. These rates will give suppression or top growth control of the other listed PERENNIAL broadleaf weeds. For best performance, make application when weeds are actively growing.

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Retreatments may be made as needed, however, do not exceed 2 pints (1 lb dicamba a.i.) per treated acre during a growing season. Do not apply in excess of  $\frac{1}{4}$  pint ( $\frac{1}{8}$  lb a.i.) of BANVEL 4-S per treated acre on light, coarse textured soils or in excess of  $\frac{1}{2}$  pint ( $\frac{1}{4}$  lb a.i.) per treated acre on fine textured, clay-type soils in areas where the roots of sensitive plants extend. Do not make repeat applications in these areas until previous applications of BANVEL 4-S have been washed into the soil by rain or irrigation.

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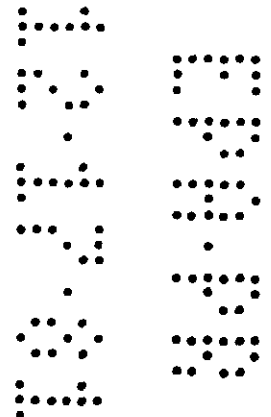


**TANK MIX TREATMENTS**

Tank mix treatments of BANVEL 4-S 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 to 1 1/2 pints (1 to 1 1/2 lb a.i.) per acre of BANVEL 4-S with 1 to 1 1/2 lb acid equivalent of 2,4-D, MCPA, MCPP or Bromoxynil. Use the higher level of the listed rate ranges when treating established weeds. Repeat treatments may be needed for control of perennial broadleaf weeds, however, do not exceed 2 pints (1 lb a.i.) of BANVEL 4-S per treated acre nor the labeled maximum of the tank mix product during a growing season.

**READ AND FOLLOW TANK MIX PRODUCT LABELING FOR PRECAUTIONARY STATEMENTS AND RESTRICTIONS**



## FOR NON-CROPLAND AREAS SUCH AS RIGHTS-OF-WAY, FENCE ROWS AND ROADWAYS

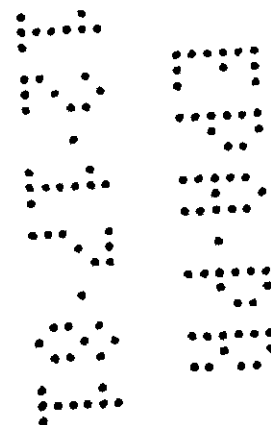
### APPLICATION RATES AND TIMINGS

Application rates and timings for BANVEL 4-S are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

- For control of listed ANNUAL broadleaf weeds, apply 1 to 1 pint (1/2 to 1 lb a.i.) per treated acre of BANVEL 4-S when weeds are small and actively growing. Apply 1 to 1.5 pints (1/2 to 3/4 lb a.i.) per treated acre when treating established weed growth.
- For control of listed BIENNIAL broadleaf weeds, apply 1 to 1 pint (1/2 to 1 lb a.i.) per treated acre of BANVEL 4-S when rosettes (first year growth) are less than 3 inches in diameter. Apply 1 to 2 pints (1/2 to 1 lb a.i.) per treated acre when rosettes are 3 inches or more in diameter. Apply 2 to 3 pints (1 to 1 1/2 lbs a.i.) per treated acre when treating weeds that have bolted. For best performance, make application when BIENNIAL weeds are in the rosette stage.

- For suppression or top growth control of listed PERENNIAL broadleaf weeds, apply 1 to 2 pints (1/2 to 1 lb a.i.) BANVEL 4-S per treated acre. For control of noted PERENNIAL weeds, apply 1 to 2 quarts (1-2 lbs a.i.) BANVEL 4-S per treated acre. For control of other listed PERENNIAL weeds, apply 2 to 4 quarts (2-4 lbs a.i.) BANVEL 4-S per treated acre. When treating dense stands of other listed PERENNIAL weeds, apply 4 to 6 quarts (4-6 lbs a.i.) BANVEL 4-S per treated acre.
- For suppression of WOODY brush and vines, apply 1 to 2 pints (1/2 to 1 lb a.i.) per treated acre of BANVEL 4-S after leaf development. Apply 1 to 2 quarts (1-2 lbs a.i.) per treated acre for added stem control and 2 to 4 quarts (2-4 lbs a.i.) per treated acre for control of stems and stem sprouts. Apply 1 to 2 gallons (4-8 lbs a.i.) per treated acre for control of stems and root sprouts.

Retreatments may be made as needed, however, do not exceed 2 gallons (8 lbs dicamba a.i.) per treated acre of BANVEL 4-S during a growing season.



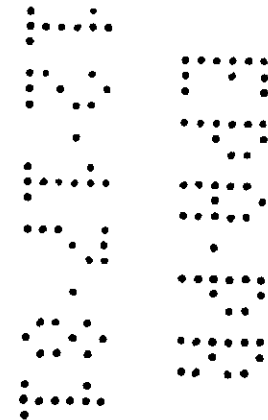
### TANK MIX TREATMENTS

**BANVEL 4 S PLUS 2,4-D TANK MIXTURES:** Tank mix treatments of BANVEL 4 S plus 2,4-D Amine or Low Volatile Ester formulations may be made to non-cropland areas for control of undesirable vegetation listed in this label, as well as additional weeds listed on the 2,4-D product label.

**READ AND FOLLOW 2,4-D PRODUCT LABELING FOR PRECAUTIONARY STATEMENTS AND RESTRICTIONS.**

- For control of **ANNUAL** broadleaf weeds, tank mix 1/4 to 1/2 pint (1/4 to 1/2 gal) of BANVEL 4 S with 1/4 to 1/2 lb acid equivalent of 2,4-D per treated acre. Use the higher rates if weeds are beyond the seedling stage at time of treatment.
- For control of **BIENNIAL** broadleaf weeds, as well as noted **PERENNIAL** weeds, tank mix 1/2 to 1 pint (1/4 to 1/2 gal) of BANVEL 4 S with 1/2 to 1 lb acid equivalent of 2,4-D per treated acre. This treatment will give growth suppression of other **PERENNIAL** broadleaf weeds and **WOODY** brush and vines.
- For control of **PERENNIAL** broadleaf weeds, tank mix 1/2 to 1 quart (1/4 to 1/2 gal) of BANVEL 4 S with 1 to 2 lbs acid equivalent of 2,4-D per treated acre.

- For control of **WOODY** brush and vines, tank mix BANVEL 4 S with 2 to 4 lbs acid equivalent of 2,4-D per treated acre. Refer to **APPLICATION RATES AND TIMINGS** section of this label under **WOODY** species for BANVEL 4 S use rates (see pages 20 and 21).



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

**NOTICE: Read "LIMITED  
WARRANTY AND LIABILITY" on the  
container before buying or using.  
If terms are not acceptable,  
return at once unopened.**

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



**VELSICOL CHEMICAL CORPORATION  
341 East Ohio Street, Chicago, Illinois 60611**

07152 300AE

