

Banvel[®] 720

HERBICIDE

**WATER SOLUBLE INDUSTRIAL
HERBICIDE FOR BRUSH AND
BROADLEAF WEED CONTROL**

ACTIVE INGREDIENTS:

Dimethylamine salt of dicamba (3,6-dichloro- <i>p</i> -anisic acid)*	12.82%
Dimethylamine salts of related acids	3.19%
Dimethylamine salt of 2,4-dichloro- phenoxyacetic acid**	24.58%
INERT INGREDIENTS:	59.41%

TOTAL 100.00%

Contains 1 pound dicamba and 1.9** pounds 2,4-D per gallon.

*Equivalent to 10.6% 3,6-dichloro-*p*-anisic acid.

**Equivalent to 20.4% 2,4-dichlorophenoxyacetic acid.

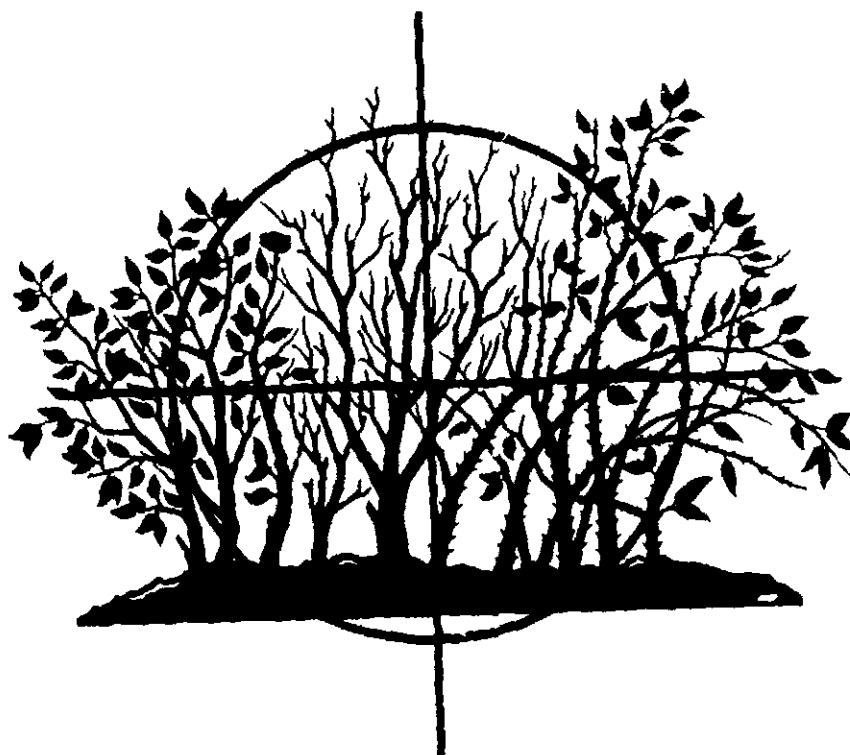
**Isomer specific by AOAC method 6.D01-5.

SHAKE WELL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE BACK PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS



SANDOZ CROP PROTECTION

123)
5 gallon label

73)
5 gallon label

NOV 8 1989

55947-20

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

Harmful if swallowed. Avoid contact with skin, eyes, and clothing. In case of contact, wash exposed skin with plenty of soap and water; flush eyes with plenty of water for at least 15 minutes and get medical attention. Keep out of the reach of children.

If swallowed, drink 1 or 2 glasses of water and induce vomiting by sticking finger down back of throat. Never induce vomiting or give anything by mouth to an unconscious person.

ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

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

Pesticide wastes are toxic. Triple rinse pesticide from containers and use rinsate in the pesticide application. Improper disposal of excess pesticide, mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER 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.

RON K. GRAPHIC SERVICES, LTD.
DISC 144 — File No. 14
08-26-87 pw Fut.-1; Fut. Bid.-2; Fut. Med.-5 (123)
Job No. 1153 Sandoz Banvel 2.5 gallon label
Galley 04

2 Fut. Bid.-3(1)
Banvel 2.5 gallon label



Flap A

77

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B

EPA Reg. No. 55947-20
EPA Est. No. 55947-TX-1

NET CONTENTS:
2½ GALLONS (9.46 L)

HERBIC
WATER SO
HERBICID
BROADLE.
ACTIVE ING
Dimethylamir
(3, 6-dichloro-
Dimethylamir
Dimethylamir
phenoxyace
INERT INGR

Contains 1 po
per gallon.

*Equivalent to

**Equivalent to
acid.

**Isomer spec

SHAKE WEL

KEEP O

**SEE BACK
PREC.**

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.**

0726251-10-AD

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RON K. GRAPHIC SERVICES, LTD.
DISC 144 — File No. 12
09-19-87 k/pw Fut.-1; Fut. Bld.-2; Fut. Med.-5 (1:23)
Job No. 1153 Sandoz Banvel 720 Herbicide - 2.5 gallon label
Galley 02

RON K. GRAPHIC SERVICES, LTD.
DISC 144 — File No. 13
09-21-87 pw Fut.-1; Fut. Bld.-2; Fut. Med.-5 (1:23)
Job No. 1153 Sandoz Banvel 720 Herbicide - 2.5 gallon label
Galley 03



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078800-40-AC

SANDOZ
CROP PROTECTION
CORPORATION
900 NORTH ZEEB RD.
MILLSBORO, DE 19966



PROPER WITH
PESTICIDES BY
LEADING THEM
PROPERLY READ
AND FOLLOW LABEL
DIRECTIONS



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

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

HERBICIDE

Banvel 720

Banvel 720

HERBICIDE

DIRECTIONS FOR USE

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

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

WATER SOLUBLE INDUSTRIAL
HERBICIDE FOR BRUSH AND
BROADLEAF WEED CONTROL



E.P.A. Reg. No. 55947-20

SANDOZCROP PROTECTION

ACCEPTED
with COMMENTS
In EPA Letter Dated:

PANTONI
321C



Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, and the FIFRA Act
of 1972, the EPA Reg. No.
55947-20

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**BEFORE USING BANVEL
INDUSTRIAL HERBICIDE
PRECAUTIONS APPEAR**

IMPORTANT

The following directions apply to all
Do not contaminate irrigation ditches
Do not apply this product through a
SENSITIVE CROP PRECAUTIONS
BANVEL 720 Herbicide may cause
particularly beans, cotton, flowers, le
potatoes, soybeans, sunflowers, to
plants when contacting their roots,
most sensitive to BANVEL 720 He
growing stage. FOLLOW THE PRE
USING BANVEL 720 HERBICIDE.
Do not treat areas where either po
soil or surface washing may cause
with the roots of desirable plants a
Avoid making application when ap
currents to areas where sensitive c
growing. Always make application v

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order to determine the direction and
an adequate buffer zone between t
sensitive plants. Coarse sprays are
Do not use aerial equipment to a
sensitive crops and plants are grow
Broadcast applications of BANVEL
seedlings being grown as a crop or
result in injury.
Select nozzles designed to produ
particles. Drift control agents and
spray particles may be used.
Do not graze dairy animals on
application.
To avoid injury to desirable plants, a
Herbicide should be thoroughly
CLEANING SPRAY EQUIPMENT
apply any other chemicals.
Consult your local or state authorit
and advice concerning these and o
BANVEL 720 Water Soluble Industr
Weed Control is recommended for
highway, pipeline), nonselective
preparation), fence rows, wastelan

MIXING AND APPLICATION

BANVEL 720 Herbicide is a water-soluble formulation which can be applied using water or oil/water emulsions as the carrier. Herbicide adjuvants or other spray additives (emulsifiers, surfactants, wetting agents, drift control agents, or penetrants) may be used for wetting, penetration, or drift control. Read and follow all use recommendations and precautions on the label(s) of product(s) used. A COMPATIBILITY TEST (Page 12 of this booklet) should be made prior to tank mixing.

BANVEL 720 Herbicide may be applied with ground or aerial equipment for broadcast treatments, or with handgun, backpack, or similar types of equipment for treatment of individual clumps or small areas (spot treatments).

NOTE: To prepare oil/water emulsions, half fill spray tank with water. Add a suitable emulsifier. Then, with constant agitation, slowly add the appropriate amount of herbicide followed by the necessary oil (or slowly add a premix of emulsifier and oil). Finally, fill the rest of the tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers.

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SPECIES CONTROLLED

When used as directed, BANVEL 720 Herbicide will control or suppress many herbaceous broadleaf weeds (annual, biennial, and perennial) as well as many unwanted woody plant and vine species. Species controlled include:

ANNUALS

Buckwheel, Wild	Lambsquarters
Carpetweed	Morningglory
Chickweed	Mustard
Clover	Pigweed
Cocklebur	Purslane
Daisy, English	Ragweed
Henbit	Smartweed
Knapweed	Velvetleaf

BIENNIALS

Ragwort, Tansy	Thistle, Musk
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PERENNIALS

Birdweed, Field	Mil. weed
Carrot, Wild	Ragweed, Perennial
(Queen Anne's Lace)	Sorrel, Sheep
Dock, Curly	Spurge, Leafy
Dogfennel	Thistle, Canada
Knapweed, Russian	Toadflax, Delmarian

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WOODY BRUSH AND VINES

Alder	Persimmon
Ash	Pine
Aspen	Plum, Wild
Basswood	Poplar
Beech	Puncturevine
Birch	Raspberry
Blackberry	Redcedar, Eastern
Cherry	Redvine
Creeper, Virginia	Rose, Multiflora
Crocosolabush	Sagebrush
Cucumber tree	Sassafras
Dogwood	Schinus
Elderberry	(Florida Holly,
Elm	Brazil Peppertree,
Gum	Christmas-berry)
Hawthorn	Serviceberry
Hemlock	Snowberry
Honeysuckle	Spruce
Ivy, Poison	Sumac
Kudzu	Sycamore
Locust	Trumpet creeper
Maple	Waxmyrtle
Oak	Willow
Olive, Russian	Witchhazel
Suppression	Yaupon

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DIRECTIONS FOR USE

Regardless of the species to be controlled, spray volumes should be high enough to allow for good spray coverage. Make applications when weeds and brush are actively growing. The addition of surfactants can increase control. Biennials are best controlled when treated in the rosette stage. Regrowth may occur on resistant species. Retreatments may be made as needed; however, do not exceed a total of 6 gallons (6 lbs. a.i. dicamba + 12 lbs. a.i. 2,4-D) of BANVEL 720 Herbicide per treated acre during a growing season. To control additional weed species, BANVEL 720 Herbicide may be tank mixed with any of the products listed on pages 10-11.

HERBACEOUS BROADLEAF WEED CONTROL: Apply 1 to 4 quarts BANVEL 720 Herbicide in 20 to 100 gallons of water per treated acre. 1 to 2 quarts of BANVEL 720 Herbicide is recommended for annuals, 2 to 4 quarts for biennials and easy-to-kill perennials, and 4 quarts for established perennials. Do not apply more than 3 gallons of product per treated acre.

BRUSH AND VINE CONTROL - High Volume Feller Spot Application: Mix 1 to 3 gallons of BANVEL 720 Herbicide in enough water to make 100 gallons of spray mix. Spray volume applied will depend on the size and density of the brush to be treated, but do not apply more than 3 gallons of product per treated acre. Direct the spray to treat all foliage, stems, and root collars to wet.

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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 components are 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 spray solution).

PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of BANVEL 720 Herbicide or tank mixes of BANVEL 720 Herbicide plus 2,4-D amine.

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- 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 720 Herbicide as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water-dispersible formulations. BANVEL 720 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 boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3, and 4.

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RON K. GRAPHIC SERVICES, LTD.
DISC 151 — File No. 68
12-08-87 es/jk Hel.-1, Hel Bld.-2(114)
Job No. 1405 BANVEL 720 Booklet
Galley 06

REGISTERED TRADEMARKS

Arsenal® is a Registered Trademark of American Cyanamid Company.
Princep® is a Registered Trademark of Ciba-Geigy Corporation.
Garlon® and Tordon® are Registered Trademarks of Dow Chemical Company.
Hyvar®, Karmex®, Krenite®, Oust®, Telar®, and Velpar® are Registered Trademarks of E.I. duPont de Nemours & Co., Incorporated.
Spike® is a Registered Trademark of Elanco Products Company.
Embarc® is a Registered Trademark of 3M.
Limit® and Roundup® are Registered Trademarks of Monsanto Agricultural Products Company.
Aulox® is a Registered Trademark of Rhone-Poulenc Chemical Company.
Fenitrol® is a Registered Trademark of Union Carbide Agricultural Products Co., Incorporated.
Royal Slo-Gro® is a Registered Trademark of Uniroyal, Incorporated.
Maintain® is a Registered Trademark of U.S. Borax & Chemical Corporation.
Banvel® is a Registered Trademark of Sandoz Ltd.

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NOTES

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DISC 151 — File No. 69
11-12-87 es/jk Hel.-1, Hel Bld.-2(114)
Job No. 1405 BANVEL 720 Booklet
Galley 07

BRUSH AND VINE CONTROL - Broadcast Applications with Ground Equipment: Apply 1 to 3 gallons BANVEL 720 Herbicide in 20 to 100 gallons of water per treated acre. Spray volume applied will depend on the size and density of the brush to be treated, but do not apply more than 3 gallons of product per treated acre. Spray all foliage, stems, and root collars to wet.

AERIAL APPLICATIONS: Aerial applications may be made to control either herbaceous or woody plants. Apply 1 to 4 quarts BANVEL 720 Herbicide (for herbaceous weeds) or 1 to 3 gallons BANVEL 720 Herbicide (for woody brush and vines) in 5 to 40 gallons of water per treated acre. Coverage is important, so increase spray volume when treating dense stands of brush or weeds. Do not apply more than 3 gallons of product per treated acre.

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TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, AND OTHER RESTRICTIONS. For broader spectrum control, BANVEL 720 Herbicide may be tank mixed with one or more of the following herbicides for noncropland uses (e.g. railroad, highway, pipeline, etc.) including forest management applications, if permitted by product labeling (e.g. 2,4-D). Add water to the spray tank prior to the addition of the tank mix products. Do not premix concentrates.

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Herbicide	Rate (lbs. a.i./treated acre)
Amitrol*	1.8 to 8.0
Azulam (Azulox®)	2.92 to 6.68
Atraiol	4.77 to 39.96
Bromacil (Hyvar®)	1.6 to 24.0
Chlorfurecol (Maintain®)	2.0 to 3.0
Chlorosulfuron (Telar®)	0.1875 to 2.25 oz.***
Delapron	4.25 to 12.75
Dicamba (Banvel®)	0.25 to 8.0****
Diquat	0.5 to 1.0
Diuron (Karmex®)	4.0 to 48.0
Fenac (Fenatrol®)	4.5 to 18.0
Fosamine ammonium (Krenite®)	8.0 to 12.0
Glyphosate (Roundup®)	0.75 to 3.75
Hexazinone (Velpar®)	0.675 to 10.8
Imazapyr** (Arsenal®)	0.5 to 1.5
Limit***	0.625
Maleic hydrazide (Royal Slo-Gro®)	2.25 to 4.5
Mefluidide (Embark®)	0.25 to 1.0
MSMA	1.0 to 2.475
Paraquat	0.5
Picloram* (Tordon®)	2.0 to 3.0
Simazine* (Princep®)	4.8 to 40.0

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Sulfometuron methyl (Oust®)	0.75 to 8.0 oz.***
Tebuthiuron (Spike®)	1.0 to 16.0
Triclopyr (Garlon®)	0.75 to 12.0
2,4-D	0.475 to 16.92****
2,4-DP	0.5 to 11.1

Due to variations that may occur in formulated products and specific use ingredients (e.g. water supplies), a COMPATIBILITY TEST as described on page 12 of this booklet is recommended prior to actual tank mixing.

* Restricted use pesticides limited to certified applicators.

** Imazapyr is the proposed common name for Arsenal. Limit does not have a common name.

*** Telar = 0.1875 to 2.25 oz. a.i./A (0.25 to 3.0 oz. product/A)
Oust = 0.75 to 9.0 oz. a.i./A (1.0 to 12.0 oz. product/A)

**** Do not exceed a total of 8 lbs. a.i. dicamba per treated acre per growing season. (BANVEL 720 Herbicide contains 1 lb. a.i. dicamba per gallon).

***** Use of extremely hard water (500 ppm) may cause this product to form a precipitate when used in a tank mix with BANVEL 720 Herbicide. Do not exceed 18 lbs. total 2,4-D acid equivalent per treated acre per growing season. (BANVEL 720 Herbicide contains the equivalent of 1.9 lbs./gal. 2,4-D acid).

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12-09-87 es/k Hel.-1, Hel.Bld.-2(114)
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