



Reg # 55947-20

PM-23

File 1924

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 7 1994

NANCY HUEBL
SANDOZ AGRO INC.
1300 EAST TOUHY AVENUE
DES PLAINES, IL 60018

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 8/16/93 Response to PR Notice 93-7
EPA Reg. No. 55947-20
BANVEL 720 HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

2924

Page 2

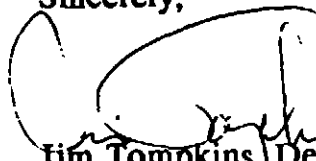
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

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

Sincerely,



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

Attachment

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Nancy Huebl
SANDOZ AGRO INC
1300 EAST TOUHY AVE
DES PLAINES IL 60018

Comment for: EPA Reg Nr.55947-20
BANVEL 720 HERBICIDE

The following specific comments pertain to your WPS
labeling submission concerning the product
cited above:

EPA has determined that a "closed" mechanical transfer
system is not required for 2,4,-D products. In the personal
protective equipment section of your amended labeling, you
may revise the statement to read as follows:

CONTAINERS GREATER THAN 1 GALLON BUT LESS THAN 5 GALLONS:
"Mixers and loaders who do not use a mechanical system
(probe and pump) to transfer the contents of this container
must wear coveralls or a chemical-resistant apron in
addition to the other required PPE."

EPA has determined that a "closed" mechanical transfer
system is not required for 2,4-D products. In the personal
protective equipment section of your amended labeling, you
may revise the statement to read as follows:

CONTAINERS 5 GALLONS OR MORE: "A mechanical system (probe
and pump) must be used for transferring the contents of this
container. If the contents of a non-refillable pesticide
container are emptied, the probe must be rinsed before
removal. If the mechanical system is used in a manner that
meets the requirements listed in the Worker Protection
Standard (WPS) for agricultural pesticides [40 CFR 170.240
(d) (4)], the handler PPE requirements may be reduced or
modified as specified in the WPS."

Add the following sentence to the paragraph on laundering
PPE: "After each day of use, clothing or PPE must not be
reused until it has been cleaned." Please refer to the
special 2,4-D guidance issued by EPA on September 13, 1993
(page 4) for placement of the sentence.

Please conform with the special 2,4-D guidance issued by EPA

SANDOZ AGRO INC
EPA Reg. Number: 55947-20
BANVEL 720 HERBICIDE
Application date: 08/16/93
Original Submission

on September 13, 1993 for adding WPS statements.

The glove requirement for "applicators and other handlers" in the "Personal Protective Equipment" section on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Waterproof gloves". The exact location is shown in Sections A and B on Part 1 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Delete the following statements from the "Personal Protective Equipment" section on your proposed labeling: "The closed systems or enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS."

Remove the statement "Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application." from its current position within the Agricultural Use Box and place it above the Agricultural Use Box.

The bodywear requirement for early entry in the Agricultural Use Requirements box on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Coveralls". The exact location is shown in Sections F and G on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

The glove requirement for early entry in the Agricultural Use Requirements box on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Waterproof gloves". The exact location is shown in Sections F and G on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Delete the crossed-out statements on your proposed label. They are redundant statements or phrases.

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BANVEL® 720 HERBICIDE

WATER SOLUBLE INDUSTRIAL HERBICIDE FOR CONTROL OF BRUSH AND BROADLEAF WEEDS ON RIGHTS-OF-WAY, FOREST BRUSH, FENCE ROWS, NON-IRRIGATION DITCHBANKS, WASTELAND, AND SIMILAR NONCROPLAND AREAS

Active Ingredients:

Dimethylamine salt of dicamba (3,6-dichloro- <i>p</i> -anisic acid)*	12.82%
Dimethylamine salt of 2,4-dichlorophenoxyacetic acid**	24.58%
<u>Inert Ingredients:</u>	<u>62.60%</u>
TOTAL	100.00%

* This product contains 10.6% 3,6-dichloro-*p*-anisic acid (dicamba)
or 1 lb. per gallon (120 g/L).

** This product contains 20.4% 2,4-dichlorophenoxyacetic acid (2,4-D)
or 1.9 lbs. per gallon (228 g/L).

** Isomer specific by AOAC method 978.05, 15th Edition.

**SHAKE WELL BEFORE USING
KEEP OUT OF REACH OF CHILDREN
CAUTION**

See side panel for additional precautionary statements

ACCEPTED
with COMMENTS
In EPA Letter Dated

MAY 1 1993

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

55947-20

EPA Reg. No. 55947-20
Net Contents: _____

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

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. 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. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. In case of contact, wash exposed skin with plenty of soap and water; for eyes flush with water for 15 minutes and get medical attention. ~~When handling this product wear chemically resistant gloves.~~

~~When mixing, loading, or applying this product or repairing or cleaning equipment used with this product, wear eye protection (face shield or safety glasses), chemical-resistant gloves, long-sleeved shirt, long pants, socks and shoes. For aerial applicators in enclosed cockpits and applicators applying this product from a tractor that has a completely enclosed cab, eye protection is not required.~~

~~Wash hands, face and arms with soap and water as soon as possible after mixing, loading, or applying this product. Wash hands, face and arms with soap and water before eating, smoking, or drinking. Wash hands and arms before using toilet. After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry. Remove saturated clothing as soon as possible and shower.~~

Personal Protective Equipment:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear
- ~~Chemical-resistant apron when mixing, or loading~~

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

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Engineering controls statements:

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

The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:

Users should:

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

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

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Apply this product only as directed on label.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

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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.

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

AGRICULTURAL USE REQUIREMENTS

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

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

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear

If this container has a volume less than 5 gallons, all persons engaged in open pouring of this product must also wear coveralls or a chemical-resistant apron.

If this container has a volume of 5 gallons or more, a mechanical system (probe and pump) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

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.

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into must be
used under
engineering
which handling*

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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 rinsates in the pesticide application. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal Law and may contaminate groundwater. 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.

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LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY

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

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BANVEL 720 HERBICIDE

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

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

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear

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

WATER SOLUBLE INDUSTRIAL HERBICIDE FOR CONTROL OF BRUSH AND BROADLEAF WEEDS ON RIGHTS-OF-WAY, FOREST BRUSH, FENCE ROWS, NON-IRRIGATION DITCHBANKS, WASTELAND, AND SIMILAR NON-CROPLAND AREAS.

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

SANDOZ

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DIRECTIONS FOR USE BOOKLET

AUGUST 1988

Banvel 720

HERBICIDE

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

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

USE
PESTICIDES
PROPERLY

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

SANDOZ

SANDOZ AGRO, INC.
1300 EAST TOLUAY AVENUE, DES PLAINES, ILLINOIS 60018

0726200-40-AF

1992 SANDOZ AGRO, INC.

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BANVEL® 720 HERBICIDE

**WATER SOLUBLE INDUSTRIAL HERBICIDE FOR
CONTROL OF BRUSH AND BROADLEAF WEEDS
ON RIGHTS-OF-WAY, FOREST BRUSH, FENCE
ROWS, NON-IRRIGATION DITCHBANKS,
WASTELAND, AND SIMILAR NONCROPLAND
AREAS.**

ACTIVE INGREDIENTS:

Dimethylamine salt of dicamba (3,6-dichloro-*o*-
anisic acid)* 12.82%
Dimethylamine salt of 2,4-dichlorophenoxyacetic
acid** 24.58%

INERT INGREDIENTS: 62.60%
TOTAL 100.00%

*This product contain 10.6% 3,6-dichloro-*o*-anisic acid
(dicamba) or 1 lb. per gallon (120 g/L).

**This product contains 20.4% 2,4-dichlorophenoxyacetic
acid (2,4-D) or 1.9 lbs. per gallon 228 (g/L).

**Isomer specific by AOAC method 978.05, 15th Edition.

**SHAKE WELL BEFORE USING
KEEP OUT OF REACH OF CHILDREN
CAUTION**

See additional precautionary statements at the end of label booklet

EPA Reg. No. 55947-20

SANDOZ AGRO, INC.
DES PLAINES, IL 60018

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**BEFORE USING BANVEL 720
WATER SOLUBLE INDUSTRIAL HERBICIDE
READ AND FOLLOW THE PRECAUTIONS
APPEARING AT THE END OF LABEL BOOKLET.**

IMPORTANT

The following directions apply to all uses of BANVEL 720 Herbicide.

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

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

SENSITIVE CROP PRECAUTIONS

BANVEL 720 Herbicide may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to BANVEL 720 Herbicide during their development or growing stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING BANVEL 720 HERBICIDE.

Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of BANVEL 720 Herbicide with the roots of desirable plants such as trees and shrubs.

Avoid making application when spray particles may be carried by air currents to areas where sensitive crops and other desirable plants are growing. Always make application where there is some air movement in order to determine the direction and distance of possible spray drift. Leave an adequate buffer zone between the area to be treated and desirable sensitive plants. Coarse sprays are less likely to drift out of target area.

Do not use aerial equipment to apply BANVEL 720 Herbicide when sensitive crops and plants are growing in the vicinity of area to be treated. Broadcast applications of BANVEL 720 Herbicide made to conifer seedlings being grown as a crop or to established conifer plantations may result in injury.

Select nozzles designed to produce minimal amounts of fine spray particles. Drift control agents and equipment designed to minimize fine spray particles may be used.

Do not graze dairy animals on treated areas within 7 days after application.

Remove meat animals from treated areas 3 days prior to slaughter.

Do not cut grass for hay within 30 days of application.

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To avoid injury to desirable plants, equipment used to apply BANVEL 720 Herbicide should be thoroughly cleaned (see PROCEDURE FOR CLEANING SPRAY EQUIPMENT on pages 10-11) before reusing to apply any other chemicals.

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations. BANVEL 720 Water Soluble Industrial Herbicide for Brush and Broadleaf Weed Control is recommended for use on rights-of-way (utility, railroad, highway, pipeline), nonselective forest brush control (including site preparation*), fence rows, non-irrigation ditchbanks, wasteland and similar non-cropland areas.

MIXING AND APPLICATION

If this container has a volume less than 5 gallons, all persons engaged in open pouring of this product must also wear coveralls or a chemical-resistant apron.

If this container has a volume of 5 gallons or more, a mechanical system (probe and pump) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

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 10 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.

*Do not use in Arizona in forests grown for commercial timber production.

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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

Buckwheat, Wild
Carpetweed
Chickweed
Clover
Cocklebur
Daisy, English
Henbit
Knapweed

Lambsquarters
Morningglory
Mustard
Pigweed
Purslane
Ragweed
Smartweed
Velvetleaf

BIENNIALS

Ragwort, Tansy

Thistle, Musk

PERENNIALS

Bindweed, Field
Carrot, Wild
(*Queen Anne's Lace*)
Dock, Curly
Dogfennel
Knapweed, Russian

Milkweed
Ragweed, Perennial
Sorrel, Sheep
Spurge, Leafy
Thistle, Canada
Toadflax, Dalmation

WOODY BRUSH AND VINES

Alder
Ash
Aspen
Basswood
Beech
Birch
Blackberry
Cherry
Creeper, Virginia
*Creosotebush
Cucumbertree
Dogwood
Elderberry
Elm
Gum
Hawthorn
Hemlock
Honeysuckle
Ivy, Poison
Kudzu
Locust
Maple
Oak
Olive, Russian

Persimmon
Pine
Plum, Wild
Poplar
Puncturevine
Raspberry
Redcedar, Eastern
Redvine
Rose, Multiflora
Sagebrush
Sassafras
Schinus
(*Florida Holly,*
Brazil Peppertree,
Christmas-berry)
Serviceberry
Snowberry
Spruce
Sumac
Sycamore
Trumpetcreeper
Waxmyrtle
Willow
Witchhazel
Yaupon

*Suppression

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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 page 8-9.

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 2 gallons of product per treated acre.

BRUSH AND VINE CONTROL - High Volume Foliar Spot

Applications: Mix 1 to 2 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 2 gallons of product per treated acre. Direct the spray to treat all foliage, stems, and root collars to wet.

BRUSH AND VINE CONTROL - Broadcast Applications with

Ground Equipment: Apply 1 to 2 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 2 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 2 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 2 gallons of product per treated acre.

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
Asulam (Asulox®)	2.92 to 6.68
Atritol	4.77 to 39.96
Bromacil (Hyvar®)	1.6 to 24.0
Chlorflurecol (Maintain®)	2.0 to 3.0
Chlorsulfuron (Telar®)	0.1875 to 2.25 oz.***
Dalapon	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®)	6.0 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
Sulfometuron methyl (Oust®)	0.75 to 9.0 oz.***
Tebuthiuron (Spike®)	1.0 to 16.0
Triclopyr (Garlon®)	0.75 to 12.0
2,4-D	0.475 to 3.5*****
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 10 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 4 lbs. total 2,4-D acid equivalent per acre per application per site. Do not exceed 16 lbs. total 2,4-D acid equivalent per treated acre per growing season. (BANVEL 720 Herbicide contains the equivalent to 1.9 lbs./gal. 2,4-D acid.)

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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)

<u>HERBICIDE FORMULATIONS</u>	<u>RATE PER ACRE</u>	<u>LEVEL TEASPOONS</u>
Dry	1 lb.	1½
Liquid	1 pt.	½

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. Rerun the above COMPATIBILITY TEST with a suitable compatibility agent (¼ 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.

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

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The steps listed below are suggested for thorough cleaning of spray equipment used to apply BANVEL 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.

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 rinsates in the pesticide application. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal Law and may contaminate groundwater. 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.

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

IMPORTANT

Harmful if swallowed. 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. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. In case of contact, wash exposed skin with plenty of soap and water; for eyes flush with water for 15 minutes and get medical attention. When handling this product wear chemically-resistant gloves.

When mixing, loading, or applying this product or repairing or cleaning equipment used with this product, wear eye protection (face shield or safety glasses), chemical-resistant gloves, long-sleeved shirt, long pants, socks and shoes. For aerial applicators in enclosed cockpits and applicators applying this product from a tractor that has a completely enclosed cab, eye protection is not required.

~~Wash hands, face and arms with soap and water as soon as possible after mixing, loading, or applying this product. Wash hands, face and arms with soap and water before eating, smoking, or drinking. Wash hands and arms before using toilet. After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry. Remove saturated clothing as soon as possible and shower.~~

Personal Protective Equipment:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear
- Chemical-resistant apron when mixing or loading

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

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Engineering controls statements:

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

The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS:

Users should:

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

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Apply this product only as directed on label.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

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