







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

NOV 1 2005

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Jon C. Wood Amvac Chemical Corp. 4695 MacArthur Court, Suite 1250 Newport Beach, CA 92660

Dear Mr. Wood:

Subject:

Revised Labeling

Topramezone SC Herbicide EPA Registration No. 5481-524

Your Submission Dated September 20, 2005

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

- 1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a. On page 6 and 7 delete "Avoidance of excessive application rates". This phrase implies that excess application rates are all right if there is no risk of injury to rotational crops.
  - b. On page 7 the phrase "not recommended" is ambiguous. Clarify the statement. A statement similar to the following is acceptable:

Do not tank mix Topramezone SC or apply in sequence with products containing isoxaflutole or mesotrione.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

oanne I. Miller Product Manager (23)

Herbicide Branch

Registration Division (7505C)

**Enclosure** 

# TOPRAMEZONE SC

# **HERBICIDE**

For postemergence weed control in field corn (grown for grain, silage or seed), popcorn and sweet corn.

Active Ing	redient:		
Topramezo	ne [3-(4.5-dihyd	lra 3-icavazalu	1) 2 mathyl 4

EPA Registration Number 5481-524	EPA Est. Number:	
(1 gallon contains 2.8 pounds of TOPRAM	1EZONE free acid)	
Total:		
Inert Ingredients:	***************************************	<u>70.3%</u>
(methylsulfonyl) phenyl] (5-hydroxy-1-ine		29.7%

ACCEPTED with COMMENTS In EPA Letter Dated:

NOV 1 2005

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

5481-524

# KEEP OUT OF REACH OF CHILDREN. CAUTION! /PRECAUCION!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail).

	FIRST AID
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	HOT LINE NUMBER
FOR THE FOLLOWI	iner or label with you when calling a poison control center or doctor, or going for treatment.  NG EMERGENCIES, PHONE 24 HOURS A DAY:  TREC

See back panel for additional Precautionary Statements.

Net contents:



# 4/12

# **Precautionary Statements**

## Hazards to Humans and Domestic Animals

**CAUTION.** Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if swallowed or absorbed through the skin. Wash thoroughly with soap and water after handling.

# Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical resistant category selection chart.

## Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Chemical resistant gloves Category A
- · Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **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 Controls Statement**

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.

## **Environmental Hazards**

DO NOT apply directly to water, or areas where surface water is present, or to inter-tidal areas below the mean high water mark. DO NOT contaminate water when disposing of equipment wash water. DO NOT apply this product through any type of irrigation system.

Product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsate.

## **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 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. 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 enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 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
- Chemical resistant gloves Category A
- Shoes plus socks

All applicable directions, restrictions, precautions and Conditions of Sale and Warranty are to be followed. This labeling must be in the user's possession during application.

# STORAGE AND DISPOSAL

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



Pesticide Storage: Store product in original container only. Store product in a cool, dry place. Do not store this product under wet conditions. If this product has been stored where freezing temperatures have occurred, agitate or mix contents of container well before use. Avoid cross-contamination with other pesticides.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned stay out of smoke. Do not reuse container.

# In Case of Emergency

In case of large-scale spillage regarding this product, call:

CHEMTREC

1-800-424-9300

**AMVAC** 

1-323-264-3910

case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment.
- Your local poison control center (hospital).
- AMVAC 1-323-264-3910

# I. General Information

TOPRAMEZONE SC is a systemic postemergence herbicide for selective control of broadleaf weeds and control or suppression of grasses in field corn (grown for grain, silage or seed), popcorn and sweet corn. This product may be used on conventional and herbicide resistant/tolerant corn hybrids AMVAC has not tested all sweet corn or popcorn hybrids or seed corn inbred lines for tolerance to TOPRAMEZONE SC. Contact your local seed supplier to obtain information regarding the tolerance of your specific sweet corn or popcorn hybrids or your seed corn inbred lines to herbicides, before using TOPRAMEZONE SC.

When applied as directed at the postemergence broadcast rate of 0.75 fluid ounce per acre, TOPRAMEZONE SC herbicide will control or suppress the broadleaf weeds listed in Table 1 and the grass weeds listed in Table 2.

For best performance it is recommended that TOPRAMEZONE SC herbicide be tank mixed with 0.25 to 1.0 pound active of atrazine herbicide per acre and other additives (See section III and V for more details). Use the lower rates of atrazine to provide added burndown of emerged weeds and the higher rates for added soil residual control.

Table 1. B

Annual Broadleaf Weeds	riazine-Resistant Biotypes  Maximum Size  (Inches) <sup>2</sup>	
Amaranth, Palmer	6	
Carpetweed	6	
Cocklebur, Common	8	
Jimsonweed	6	
Kochia	6	
Lambsquarters, Common	6	
Mallow, Venice	33	
Morningglory sp.	63	
Mustard sp.	6	
Nightshade, Black	6	
Nightshade, Eastern Black	6	
Nightshade, Hairy	6	
Pigweed, Prostrate	6	
Pigweed, Redroot	6	
Pigweed, Smooth	6	
Pigweed, Tumble	4	
Ragweed, Common	6	
Ragweed, Giant	8	
Sida, Prickly	3	
Smartweed, Ladysthumb	3	
Smartweed, Pennsylvania	3	
Sunflower, Volunteer	8	
Sunflower, Wild (common)	8	
Thistle, Canada	63	
Velvetleaf	8	
Waterhemp, Common :	6	
Waterhemp, Tall	6	

ALS (acetolactate synthase) resistant weeds include those weeds resistant to the sulfonylurea (e.g., Spirit and Exceed), imidazolinone (e.g., Lightning®), or sulfonamide (e.g., Python™) family of herbicides.

<sup>&</sup>lt;sup>2</sup>For best performance spray before weeds exceed the maximum stem height or vine length listed.

<sup>&</sup>lt;sup>3</sup>Partially controlled or suppressed.

利日

Table 2. Annual Grass List, Including ALS1-Resistant Biotypes

Annual Grasses	Maximum Leaf Stage <sup>2</sup>	Maximum Size (Inches) <sup>2</sup>
Barnyardgrass	4	4
Crabgrass, Large	4	3
Crabgrass, Smooth	4	3
Cupgrass, Woolly	33	3 <sup>3</sup>
Foxtail, Giant	4	4
Foxtail, Green	33	3 <sup>3</sup>
Foxtail, Yellow	33	3 <sup>3</sup>
Goosegrass	4	3
Johnsongrass, Seedling	3 <sup>3</sup>	4 <sup>3</sup>
Millet, Wild-Proso	33	3 <sup>3</sup>
Panicum, Fall	3 <sup>3</sup>	3 <sup>3</sup>
Signalgrass, Broadleaf	33	3 <sup>3</sup>

ALS-resistant weeds include those weeds resistant to the sulfonylurea (e.g., Accent® and Option®) family of herbicides.

## ode of Action

TOPRAMEZONE SC is absorbed by leaves, roots, and shoots and translocated to the growing points of sensitive weeds to provide control of emerged weed. TOPRAMEZONE SC controls weeds by inhibiting carotenoid biosynthesis (HPPD inhibitor). Temperatures and moisture conditions for active plant growth are important for optimum TOPRAMEZONE SC activity.

## Herbicide Resistance

No resistance to TOPRAMEZONE SC or cross-resistance to other HPPD inhibitor herbicides is known to exist. Repeated applications of a single mode of action in a weed management plan increases the probability of selecting for naturally occurring biotypes with less susceptibility to herbicides using that mode of action. Therefore, TOPRAMEZONE SC should be tank mixed with a herbicide having a different mode of action and/or be used in a rotation with herbicides having a different mode of action. Other HPPD inhibitor herbicides include Balance (isoxaflutole) and Callisto (mesotrione).

A weed biotype is a naturally occurring individual within a given species that has a slightly different, but distinct genetic makeup from other plants.

## Crop Tolerance

OPRAMEZONE SC should be applied during favorable growing conditions for optimum crop tolerance and weed control. Crops ...der environmental stress are more likely to show injury from any herbicide application. Rarely, plants under these conditions treated with TOPRAMEZONE SC may show some transient bleaching of the portion of the leaves intercepting the spray application. These symptoms are temporary and occur infrequently; crop growth is not affected.

# Coverage

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

### Cultivation

Avoid disturbing (e.g., cultivation) treated areas for at least 7 days following application to allow best herbicide uptake, translocation, and weed control.

## **Insecticide Information:**

TOPRAMEZONE SC may be used sequentially or in combination with all soil or foliar applied insecticides registered for use in corn.

# Cleaning Spray Equipment

To avoid injury to sensitive crops, drain and clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and then triple rinsing the equipment before and after applying this product.

<sup>&</sup>lt;sup>2</sup>For best performance spray before grasses exceed the maximum leaf stage and/or height listed in this table.

<sup>&</sup>lt;sup>3</sup>Partially controlled or suppressed.



# **II. Application Instructions**

TOPRAMEZONE SC is effective for postemergence control of annual weeds in conservation or conventional-tillage production systems. Apply TOPRAMEZONE SC-herbicide as a postemergence treatment to corn when weeds are actively growing. For optimal weed control apply TOPRAMEZONE SC before weeds exceed labeled height.

# **TOPRAMEZONE SC Application Rate and Timing:**

- Apply TOPRAMEZONE SC at a broadcast rate of 0.75 fluid ounce per acre.
- Do not exceed a total of 0.75 fluid ounce per treated acre per growing season.
- TOPRAMEZONE SC can be applied postemergence up to 45 days prior to corn harvest.
- TOPRAMEZONE SC applications should be made with drop nozzles if the crop canopy prevents adequate weed coverage.

TOPRAMEZONE SC should be applied a minimum of one hour before rainfall or overhead irrigation.

Ground Application Methods and Equipment: Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. Use higher water volumes for fields with dense vegetation. Flat-fan nozzles tips are recommended for postemergence applications. A spray pressure of 20 to 40 psi is recommended.

**Spray Drift:** Do not apply when weather conditions may cause drift to adjacent crops and vegetation; injury may result if this occurs. To avoid spray drift from treated areas, do not make applications when wind speeds exceed 10 mph or during periods of temperature inversions. Do not apply within 30 feet of native plant community.

Use of larger droplet sizes will reduce spray drift. Agriculturally approved drift-reducing additives may also be used.

# Aerial Application Methods and Equipment:

Uniformly apply with properly calibrated aerial equipment in 2 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Adequate spray volume must be used to provide accurate and uniform distribution of spray particles over the treated area and to avoid drift of spray particles to non-target areas.

To avoid injury to sensitive crops from drift, aerial applicators must adhere to the following SPECIAL AERIAL USE DIRECTIONS AND PRECAUTIONS.

- Nozzle height above ground must be a maximum of 10 feet.
- Nozzles must be pointed towards the rear of the aircraft. The downward angle of the nozzle should not be greater than 20 degrees.
- To minimize wing-tip vortex roll, nozzles or spray boom must not be located any closer to end of wing or rotor than three-fourths the distance from the center of the aircraft.
- Use a maximum spray pressure of 40 psi.
- A buffer zone must be established between the area to be sprayed and sensitive crops.
- DO NOT spray when wind velocity is greater than 5 mph. Coarse sprays (larger droplets) are less likely to drift.

The applicator is responsible for any loss or damage that results from spraying **TOPRAMEZONE SC** in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

# III. Additives

Postemergence applications of TOPRAMEZONE SC require the addition of an adjuvant and a nitrogen fertilizer source to achieve optimum weed control.

I. ADJUVANTS: Unless specific recommendations are given in Section VII Tank Mixes of this label, always use a methylated seed oil (MSO) or a petroleum-based or vegetable seed-based oil concentrate (COC) with Topramezone SC. For best performance across a wide range of environmental conditions, including when weeds are under moisture and temperature stress, use of an MSO is recommended. Apply these oil based adjuvant concentrates at the rates of 1.0 to 1.5 gallons per 100 gallons of water (1.0% to 1.5% v/v). Use the higher rate when making application during periods of hot dry weather.

### AND

II. NITROGEN FERTILIZER SOURCE: Recommended nitrogen based fertilizers include urea ammonium nitrate (UAN; 28-34%) or ammonium phosphate (10-34-0) at 1.25 to 2.5 gallons per hundred gallons of water (1.25% to 2.5% v/v). Instead of a liquid fertilizer, spray grade ammonium sulfate (AMS) at a minimum rate of 8.5 pounds per 100 gallons of water may be used. Use the higher rate when making application during periods of hot dry weather.

Agriculturally approved drift-reducing additives may be used in applications with TOPRAMEZONE SC.

# IV. Mixing Order



Liquid fertilizer as a carrier for postemergence applications of **TOPRAMEZONE SC** herbicide is not recommended. Use only water as a carrier.

## WATER:

- 1. Fill the spray tank ½ to ¾ full with clean water.
- 2. Add the required amount of TOPRAMEZONE SC to the spray tank while agitating.
- 3. After the TOPRAMEZONE SC has visibly dispersed, add spray additives and fill the remainder of the tank with water.

## TANK-MIX PREPARATION:

When tank-mixing TOPRAMEZONE SC with recommended herbicides, add the other herbicides and other components in the following order, while agitating:

- 1. Fill spray tank ½ to ¾ full with clean water.
- 2. Add other soluble packet products and thoroughly mix.
- 3. Add TOPRAMEZONE SC and thoroughly mix.
- 4. Add WP (wettable powder), DG (dispersible granule), DF (dry flowable), or LF (liquid flowable) formulations.
- 5. Add EC (emulsifiable concentrate) products.
- 6. Add adjuvant to the spray tank.
- 7 Add liquid fertilizer.
  - While agitating, fill the remainder of the tank with water.

# V. General Tank Mixing Information

TOPRAMEZONE SC is recommended to be used sequentially or tank mixed with other herbicides as part of a complete weed control program. Tank mix recommendations are for use only in states where the sequential or tank mix product and application site are registered. Refer to section VII. Crop Specific Information for more details and for specific tank mix restrictions. Read and follow the applicable Restrictions and Limitations and Directions for Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

# VI. General Restrictions and Limitations

• One application may be made per growing season; no more than 0.75 fluid ounce per acre (0.0164 lbs ai/acre) of **TOPRAMEZONE SC** may be applied during the growing season.

٠.

- In the event of a crop loss due to weather, any corn type can be replanted following an application of TOPRAMEZONE SC herbicide. If TOPRAMEZONE SC was tank-mixed with other herbicides, the label restrictions for these herbicides must also be followed.
  - DO NOT apply TOPRAMEZONE SC within 45 days of corn harvest (fresh market sweet corn, silage, fodder, or grain).
- DO NOT graze or feed treated corn forage, silage, fodder, or grain for at least 45 days after an application of TOPRAMEZONE SC.

ROTATIONAL CROPS GUIDELINE: The following rotational crops may be planted after applying TOPRAMEZONE SC herbicide at the recommended rate in corn. Planting earlier than the recommended interval may result in crop injury. Avoidance of excessive application rates by minimizing overlaps of spray swaths and by switching off spray boom when turning (end rows) reduces risk of injury to rotational crops.

Minimum Time From Application to Planting	Crops
Anytime	All field corn types, field corn grown for seed, sweet corn, popcorn
Three months	Cereal crops (wheat, barley, oats, and rye)
Nine months	Alfalfa, cotton, peanuts, potato, sorghum and sunflower.  Soybeans (except for geographic areas defined in eighteen months category)
Eighteen months	Soybean- For use in SD, ND, MN, MI, WI, IA (North of I-80), IL (North of I-80) and NE (North of Hwy 92).  All other crops not listed in categories above



# VII. Crop-Specific Information

# Corn (Field, Pop, Seed, and Sweet)

TOPRAMEZONE SC can be applied postemergence on all corn types and hybrids, including Clearfield®, Roundup Ready®, and LibertyLink® hybrids.

TOPRAMEZONE SC may be used in tank mixtures or sequential applications with other herbicides registered for use in corn.

## Tank Mixes

# Recommended Tank-Mixes for Postemergence Applications of TOPRAMEZONE SC-include:

Accent®

ine
basagran®
Clarity®\*
Bicep II Magnum®
Bicep Lite II Magnum®
Buctril®
Degree™
Degree Xtra®
Distinct®\*
Dual II Magnum®
G-Max Lite
Glyphosate

Guardsman Max Harness®

Harness® Xtra

Hornet

2.4-D\*

Keystone

Keystone

Laddok

Liberty

Lightning

Marksman

Option

Outlook

Permit

Prowl

Roundup UltraMax

Steadfast Stinger
Surpass TopNotch
Tough Tough

Note: If **TOPRAMEZONE SC** is tank mixed with other herbicides, the label restrictions for the most restrictive of the tank mix components ld be followed.

Topramezone SC is not recommended for tank mixtures or sequential uses with products containing isoxaflutole (e.g. Balance. Epic<sup>®</sup>) or mesotrione (e.g. Callisto, Lumax<sup>®</sup>, Camix<sup>®</sup>, Lexar<sup>TM</sup>).

÷.

<sup>\*</sup>Use of methylated seed oil (MSO) or crop oil concentrate (COC) in tank mixtures of TOPRAMEZONE SC plus 2,4-D. CLARITY. DISTINCT, or MARKSMAN may result in crop injury if applied during periods of cold, wet weather or hot and/or humid weather. Under these environmental conditions the use of a nonionic surfactant in place of an oil based adjuvant is recommended.

# Sequential Herbicide Combinations and Uses

In addition to the control of many broadleaf weeds, TOPRAMEZONE SC controls or suppresses growth of several grass species. To target a broader spectrum of grasses TOPRAMEZONE SC should be used as a sequential postemergence treatment following a preemergence grass herbicide (such as Outlook, Prowl, Guardsman Max, Dual II Magnum, Harness, or Surpass).

TOPRAMEZONE SC may also be used in sequential programs with registered burn-down herbicides.

Pests listed in this label:		
Common Name Scientific Name		
Amaranth, Palmer	Amaranthus palmeri	
Barnyardgrass	Echinochloa crus-galli	
Carpetweed	Mollugo verticillata	
Crabgrass, Large	Digitaria sanguinalis	
Crabgrass, Smooth	Digitaria ischaemum	
Cocklebur, Common	Xanthium strumarium	
Cupgrass, Woolly	Eriochloa villosa	
Foxtail, Giant	Setaria faberi	
Foxtail, Green	Setaria viridis	
Foxtail, Yellow	Setaria lutescens	
Goosegrass	Eleusine indica	
Jimsonweed	Datura stramonium	
Johnsongrass	Sorghum halepense	
Kochia	Kochia scoparia <sup>—</sup>	
Lambsquarters, Common	Chenopodium album	
Mallow, Venice	Hibiscus trionum	
Millet, Wild-Proso	Panicum miliaceum	
Morningglory	Ipomoea sp.	
Mustard	Brassica sp.	
Nightshade, Black	Solanum nigrum	
Nightshade, Eastern Black	Solanum ptycanthum	
Nightshade, Hairy	Solanum sarrachoides	
Panicum, Fall	Panicum dichotomiflorum	
Pigweed, Prostrate	Amaranthus blitoides	
Pigweed, Redroot	Amaranthus retroflexus	
Pigweed, Smooth	Amaranthus hybridus	
Pigweed, Tumble	Amaranthus album	
Ragweed, Common :	Ambrosia artemisiifolia	
Ragweed, Giant	Ambrosia trifida	
Sida, Prickly	Sida spinosa	
Signalgrass, Broadleaf	Brachiaria platyphylla	
Smartweed, Pennsylvania	Polygonum pensylvanicum	
Smartweed, Ladysthumb	Polygonum persicaria	
Sunflower, Volunteer	Helianthus sp.	
Sunflower, Wild (common)	Helianthus annuus	
Thistle, Canada	Cirsium arvense	
Velvetleaf	Abutilon theophrasti	
Waterhemp, Common	Amaranthus rudis	
Waterhemp, Tall	Amaranthus tuberculatus	

### LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE FULLEST EXTENT PERMITTED BY LAW MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

Clarity, Distinct, Lightning, Marksman, and Prowl are registered trademarks and G-Max Lite, Guardsman Max, and Outlook, are trademarks of BASF Corporation.

Basagran, Clearfield and Laddok are trademarks of BASF AG.

Accent and Steadfast are registered trademarks of E.I. duPont de Nemours and Company.

Balance, Buctril, Epic, Liberty, LibertyLink, and Option are registered trademarks of Bayer.

Camix®, Dual II Magnum, Exceed, Bicep II Magnum, Bicep Lite II Magnum, Lumax and Tough are registered trademarks and Spirit, Lexar<sup>™</sup> and Callisto are trademarks of Syngenta Group Company.

Degree Xtra, Harness, Harness Xtra, Permit, Roundup Ready are registered trademarks and Degree and Roundup Ultramax are trademarks of Monsanto Technology LLC.

Hornet, Keystone, Python, Stinger, Surpass, and TopNotch are trademarks of Dow AgroSciences LLC.

©Amvac Chemical Corporation 4100 E. Washington Boulevard Los Angeles, CA. 90023 All rights reserved September 2005