U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
5481-689	10/20/25

Term of Issuance:
Unconditional

Name of Pesticide Product:
AMVAC 87181

Name and Address of Registrant (include ZIP Code):

AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. You have 18 months from the date of registration to provide these data.

Continues page 2

Signature of Approving Official:
Kevin R Ulrich
for

Kevin Ulrich (for)
Nathan Mellor, Chief
Fungicide Herbicide Branch, Registration Division (7505T)

Date:
10/20/25

EPA Form 8570-6

3. Make the following label changes before you release the product for shipment:

    - Revise the EPA Registration Number to read, “EPA Reg. No. 5481-689.”

4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 12/09/2024

If you have any questions, please contact Hector Escobar at 202-566-1371 or at escobar.hector@epa.gov.

Enclosure: Stamped Label

{Note to reviewer: Text in curvy brackets { } indicate a note to the EPA reviewer and will not appear on the label. Text in brackets [ ] is optional, and may or may not appear on the end use label. Text in parentheses ( ) will appear on the end use label.}

AMV 87181

[ABN Impact SWT Herbicide]

For control of emerged weeds in all types of sweet corn and weed control between crops.

Active Ingredient:

Topramezone [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl) phenyl] (5-hydroxy-1-methyl-1*H*-pyrazol-4-yl) methanone.....29.7%

Inert Ingredients:..... 70.3%

Total:..... 100.0%

(1 gallon contains 2.8 pounds of TOPRAMEZONE free acid)

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 the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.

EMERGENCY INFORMATION

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:

For Medical Emergencies phone:.....1-888-681-4261
For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC®.....1-800-424-9300
For Product Use Information phone: AMVAC®.....1-888-462-6822

See [inside] [side] [back] [panel] [booklet] [attached] [to] [pouch] [bag] [seal] [pack] for [complete] [additional] [First Aid,] [Precautionary Statements] [,Directions for Use] [,Storage and Disposal] [,Limited Warranty and Disclaimer].

EPA Reg. No. 5481-689 Net Contents: _____
EPA Est. No. _____
Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

{NOTE TO REVIEWER: The following are optional logos.}

AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660
1-888-462-6822

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 and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

APPLICATORS AND OTHER HANDLERS MUST WEAR:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils.
- 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 clothing/PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENGINEERING CONTROLS

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 170.607(d-f)], 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.

NON-TARGET ORGANISM ADVISORY STATEMENT
This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Groundwater Advisory
This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory
This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as a high potential for reaching both surface water and aquatic sediment via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of topramezone and its transformation products from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

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 made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils..
- Shoes plus socks

All applicable directions, restrictions, precautions and Limited Warranty and Disclaimer are to be followed. This

labeling must be in the user's possession during application.

I. INFORMATION

AMV 87181 is a systemic herbicide for selective control or growth suppression of emerged broadleaf and grass weeds in sweet corn (grown for ear, kernel or seed) and between crop applications. This product may be used on conventional and herbicide resistant/tolerant corn hybrids. AMVAC has not tested all inbred lines of sweet corn for tolerance to AMV 87181. Before using AMV 87181, refer to seed company recommendations for use on inbred lines of sweet corn.

Susceptible weeds will stop growing soon after AMV 87181 application while death of weeds may take several more days, depending on growing conditions before and after application, and weed species and size. When applied broadcast to emerged weeds as directed, AMV 87181 will control or suppress the broadleaf weeds listed in Table 1 and the grass weeds listed in Table 2.

AMV 87181 may be tank-mixed with other herbicides to provide both broader spectrum and residual weed control. Refer to Tank Mixes in the Crop Use Directions (**Section VII**). It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing.

AMV 87181 applications must also include recommended spray additives. Refer to Additives and Mixing Order (**Sections III and IV**).

Table 1. Emerged Broadleaf Weeds Controlled or Partially Controlled with AMV 87181 and Maximum Weed Size at Application

Broadleaf Weeds[1]	**AMV 87181 0.75 fl oz per acre**	**AMV 87181 1.0 fl oz per acre**
	Weeds ≤ 4 inches in Size[2]	Weeds ≤ 6 inches in Size[2]
Amaranth, Palmer	C	C
Amaranth, Powell	C	C
Bindweed, field	PC	PC
Burcucumber	PC[3]	PC
Buckwheat, wild	NC	PC[3]
Canola, volunteer	C	C
Carpetweed	C	C
Chickweed, common	C	C
Cocklebur, common	C	C
Dandelion	PC	PC
Devil's-claw	PC[3]	PC
Galinsoga, hairy	C	C
Henbit	C	C
Jimsonweed	C	C
Kochia	PC	PC
Ladysthumb	PC	PC
Lambsquarters, common	C	C
Lettuce, prickly	C	C
Mallow, common	PC[3]	PC[3]
Mallow, Venice	PC[3]	PC[3]

Broadleaf Weeds[1]	AMV 87181 0.75 fl oz per acre	AMV 87181 1.0 fl oz per acre
	Weeds ≤ 4 inches in Size[2]	Weeds ≤ 6 inches in Size[2]
Marestail (horseweed)	C	C
Morningglory, entireleaf	PC[3]	PC[3]
Morningglory, ivyleaf	PC[3]	PC[3]
Mustard, wild	C	C
Nightshade, black	C	C
Nightshade, Eastern black	C	C
Nightshade, hairy	C	C
Pigweed, prostrate	C	C
Pigweed, redroot	C	C
Pigweed, smooth	C	C
Pigweed, tumble	C	C
Purslane, common	PC[3]	PC[3]
Pusley, Florida	C[3]	C
Ragweed, common	C	C
Ragweed, giant	C	C
Shepherd's-purse	C	C
Sida, prickly	PC[3]	PC
Smartweed, Pennsylvania	PC	PC
Sunflower, wild (common)	C	C
Thistle, Canada	PC[3]	PC
Thistle, Russian	C	C
Velvetleaf	C	C
Waterhemp, common	C	C
Waterhemp, tall	C	C

[1]Refer to **Section IX** for a list of scientific names.
[2]Broadleaf Weed Rating: C=Control; PC=Partial Control; NC=Not Controlled.
[3]Apply before weed exceeds 3 inches in height.

Table 2. Emerged Grass Weeds Controlled or Partially Controlled with AMV 87181 at 0.75 to 2.0 fl oz/A and Maximum Weed Size at Application

Grass Weeds[1]	AMV 87181 0.75 fl oz per acre	AMV 87181 1.0 fl oz per acre	AMV 87181 1.5 – 2.0 fl oz per acre
	Grasses ≤ 3 Inch Size[2]	Grasses ≤ 4 Inch Size[2]	Grasses ≤ 4 Inch Size[2]
Barnyardgrass	PC	C	C
Crabgrass, large	PC	PC	C
Crabgrass, smooth	PC	PC	C
Cupgrass, woolly	PC	C[3]	C
Foxtail, giant	C	C	C
Foxtail, green	PC	C	C
Foxtail, yellow	PC	PC[3]	C
Goosegrass	C	C	C
Johnsongrass, rhizome	NC	NC	PC[4]

Grass Weeds[1]	AMV 87181 0.75 fl oz per acre	AMV 87181 1.0 fl oz per acre	AMV 87181 1.5 – 2.0 fl oz per acre
	Grasses ≤ 3 Inch Size[2]	Grasses ≤ 4 Inch Size[2]	Grasses ≤ 4 Inch Size[2]
Johnsongrass, seedling	PC	C	C
Millet, wild-proso	C	C	C
Panicum, fall	PC	PC[3]	C
Panicum, Texas	PC	PC	PC[4]
Sandbur, field	NC	PC	PC[4]
Shattercane	PC	PC	PC[4]
Signalgrass, broadleaf	PC	PC[3]	PC

[1]Refer to **Section IX** for a list of scientific names.
[2]Grass Weed Rating: C=Control; PC=Partial Control; NC = Not Controlled.
[3]Apply before grass exceeds 3 inches in height.
[4]For best performance on these grass weeds use a rate of 2 fl oz per acre.

Herbicide Group and Site of Action

AMV 87181 is absorbed by leaves, roots, and shoots and translocated to the growing points of sensitive weeds to provide control of emerged weeds. AMV 87181 controls weeds by inhibiting carotenoid biosynthesis (HPPD inhibitor GROUP 27). Temperature and moisture conditions for active plant growth are important for optimum AMV 87181 activity. AMV 87181 applications to weeds during periods of stress conditions such as extreme cold or hot temperatures, and/or moisture stress can result in reduced herbicidal performance.

WEED RESISTANCE MANAGEMENT

It is critical to adopt a diversified weed management system in order to provide appropriate stewardship for this group 27 herbicide and to ensure consistent weed control and to best protect potential crop yield. Herbicide best management practices should be augmented with cultural (e.g., crop rotation) and mechanical (e.g., tillage) tactics. Effort should be expended to keep escaped weeds from contributing seeds to the soil weed seed bank. Scouting soon after herbicide application is an important strategy to identify weed population shifts or herbicide-resistant biotypes before the problems become more difficult to manage. Take precautions to keep equipment free of weed seeds when moving from field to field. This is extremely important if fields are custom harvested. By adopting best management practices and providing stewardship to protect against the evolution of herbicide resistance, crop yield potential is higher and thus economic returns are greater.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of AMV 87181 within a growing season and among growing seasons with herbicide groups other than 27 that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

- Scout fields prior to application to identify the weed species present and to determine if the intended application of the product, and tank-mix partners if needed, will be effective on the stages of weed growth observed in a specific field.
- Following herbicide application, scout the fields to confirm efficacy of the treatment and to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same weed species.
- **If resistance is suspected, prevent weed seed production in the affected area by using an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage.** Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and planting clean seed.
- Do not rely on a single herbicide site of action (i.e. herbicide group number) for weed control during the growing season.
- Avoid making application of herbicides having the same group number(s) more than twice per season.
- Use a preemergence herbicide providing residual control of grass and broadleaf weeds to reduce weed emergence and competition with the crop and allow more timely postemergence herbicide application.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different herbicide group number, if available.
- Contact your local extension specialist or certified crop advisor to determine if suspected resistant weeds to these herbicide group number(s) have been found in your region, for additional herbicide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information on product performance and weed resistance management or to report suspected weed resistance, contact your local AMVAC representative directly or at 1-888-462-6822.

Crop Tolerance

AMV 87181 should be applied during favorable growing conditions for optimum crop tolerance and weed control. Crops under environmental stress are more likely to show injury from any herbicide application. Rarely, plants under extremely stressful growing conditions and treated with AMV 87181 may show minor, transient bleaching of the portion of the leaves intercepting the spray application. These symptoms are temporary and crop growth is not affected.

Cultivation

Avoid disturbing (e.g., cultivation) treated areas for at least 7 days following an application of AMV 87181 to allow maximum possible herbicide uptake, translocation, and weed control. If cultivation is part of a diverse weed management program, it is important to avoid deep cultivation that will move dormant weed seeds into the soil zone where germination is likely.

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. Equipment should be cleaned and triple rinsed before and after applying this product.

II. APPLICATION INSTRUCTIONS

AMV 87181 is effective for control of many emerged weeds in conservation and conventional-tillage crop production systems.

Do not apply AMV 87181 within 30 feet of native plant community.

The applicator is responsible for any loss or damage that results from spraying AMV 87181 in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances when making applications.

AMV 87181 **Application and Timing:**

- Apply AMV 87181 to emerged broadleaf and grass weeds that are actively growing.
- For optimal weed control apply AMV 87181 before weeds exceed labeled maximum size.
- AMV 87181 should be applied a minimum of one hour before rainfall or overhead irrigation.

Spray Coverage

Weeds must be thoroughly covered with spray droplets to achieve consistent control of emerged weeds. Dense leaf canopies will shelter small weeds and can prevent adequate spray coverage on these weeds resulting in poor overall weed control.

Ground Application Methods and Equipment

Uniformly apply AMV 87181 with properly calibrated ground equipment in 15 or more gallons of water per acre. Use water volumes of greater than 15 gallons per acre when treating larger weeds and/or dense weed infestations. Select nozzle types, spray pressure, and carrier volume that deliver medium to coarse spray droplets (250-400 microns in diameter) which will thoroughly cover target weeds and will penetrate to smaller weeds which are sheltered by larger weeds. Do not use nozzle types that produce very coarse, extremely coarse or ultra-coarse spray droplets, as this may result in unsatisfactory weed control. Refer to ASABE S572.1 droplet size classification located at www.ASABE.org. AMV 87181 application can be made with drop nozzles if the crop canopy prevents adequate weed coverage using broadcast application methods.

Aerial Application Methods and Equipment

Uniformly apply with properly calibrated aerial equipment in 3 or more gallons of water per acre. 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.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must select nozzle and pressure that deliver medium to coarse droplets in accordance with the American Society of Agricultural & Biological Engineers Standard 641 (ASABE S641).
- If the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swatch displacement upwind at the downwind edge of the field.
- Do not apply when windspeeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.

- Applicators must select nozzle and pressure that deliver medium to coarse droplets in accordance with the American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- Do not apply when windspeeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly. Or under unfavorable environmental conditions.

Controlling Droplet Size- Ground Boom

- Volume- Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure- Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle- Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size- Aircraft

- Adjust Nozzles- Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT- Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT- Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions)

indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

III. ADDITIVES

Applications of AMV 87181 to emerged weeds require the addition of an adjuvant **AND** a nitrogen fertilizer source to achieve optimum control, unless specific directions are given in **Section VII**. Crop Use Directions – Tank Mixes. When using an adjuvant with this product, selecting an adjuvant that meets the standards of the Council of Producers and Distributors of Agrotechnology (CPDA) adjuvant certification program is recommended. See Tables 1 and 2 for Maximum Weed Size when determining additive rates specified below.

1. ADJUVANTS: When applying AMV 87181 alone or in a tank-mix with atrazine, use either a methylated seed oil (MSO) or high surfactant methylated oil concentrate (HSMOC) with AMV 87181 for best performance across a wide range of environmental conditions. MSO or HSMOC must contain a minimum of 10% or 40% emulsifiers, respectively. Apply either MSO adjuvants at rates of 1.0 to 1.5 gallons per 100 gallons of water (1.0% to 1.5% v/v), or HSMOC adjuvants at rates of 2 to 3 quarts per 100 gallons of water (0.5% to 0.75% v/v). Use the full adjuvant rate when making an application in arid conditions, or during periods of hot dry weather and to larger weeds.

AND

2. NITROGEN FERTILIZER SOURCE: Recommended nitrogen-based fertilizers include urea ammonium nitrate (UAN; 28-32%) at 2.5 gallons per hundred gallons of water (2.5% v/v). Instead of a liquid fertilizer, dry spray grade ammonium sulfate (AMS) at 2.0 to 3.0 pounds per acre, or a liquid AMS product delivering 3.4 pounds per gallon of AMS, may be used. Use of AMS is strongly recommended as an additive where water hardness (high mineral content) is a concern. Use the full AMS rate when making an application in arid conditions, or during periods of hot dry weather and to larger weeds.

IV. MIXING ORDER

The following is a mixing order guidelines for AMV 87181 when tank-mixing with other recommended herbicides and components, including spray adjuvants and liquid fertilizers. Maintain tank agitation during the mixing process and continue agitation while spraying until the application is completed. In the event that the application is stopped and the tank mixture settles, it is critical to agitate the mixture thoroughly before spraying is resumed.

TANK-MIX PREPARATION:

1. Fill spray tank ½ to ¾ full with clean water and start agitation.
2. Add water-soluble PVA packet products, if included, and thoroughly mix until fully dissolved.
3. Add water-soluble additives, including dry or liquid nitrogen fertilizers such as AMS or UAN.
4. Add AMV 87181 herbicide.
5. Add other water-dispersible products such as dispersible granules, dry flowables, suspension concentrates, or liquid flowables.
6. Add water-soluble products.
7. Add emulsifiable concentrates, including MSO adjuvants.
8. Fill the remainder of spray tank with water and ensure thorough mixing of all products.

V. TANK MIX INFORMATION

AMV 87181 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 is registered. Refer to Crop Use Directions (**Section VII**) for more details and for specific tank mix restrictions. Read and follow the applicable Restrictions and Limitations (**Section VI**) and Directions for Use on all products included in any tank mix. The most restrictive labeling applies to tank mixes. Liquid fertilizer is not recommended as a carrier for in-crop applications of AMV 87181. Use only water as a carrier.

VI. ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after uniformly applying AMV 87181 at the specified application rates. Do not plant earlier than the specified interval at the rates shown in the chart below, as crop injury could occur. Avoid over-applications by minimizing overlaps of spray swaths and by switching off spray boom when turning (end rows). If AMV 87181 was tank-mixed with other herbicides, the label with the most restrictive replanting and crop rotation restrictions for these herbicides must also be followed.

For rotational crops following the use of sequential applications of AMV 87181, the rotational interval begins after the last AMV 87181 application.

Table 3. ROTATIONAL CROP RESTRICTIONS

	Rotational Interval (months, based on maximum annual application rate)		
	AMV 87181 Application Rate (fl oz per acre)		
Rotational Crop	**0.5** (0.011 lb AI/A)	**0.75** (0.016 lb AI/A)	**1.0-2.0** (0.022 to 0.044 lb AI/A)
Corn, sweet corn and popcorn (all types)	0	0	0
Sugarcane	0	0	0
Cereal grains (wheat, barley, oats, rye)	3	3	3
Grass, grown for seed and forage	3	3	3
Rice	3	3	3
Alfalfa	9	9	9
Cotton	9	9	9
Flax	9	9	9
Peanut	9	9	9
Potato	9	9	9
Sorghum	9	9	9
Soybean	9	9	9
Sunflower	9	9	9
Canola	9	9	18
Dry Bean (excluding cranberry bean)	9	9[1]	18[2]
Green Bean (including seed production)	9[3]	9[3,4]	18[5]
Pea	9	9	18[2]
Sugar beet	9[4]	9[4]	18[2]
All Other Crops	18	18	18

[1] 18 month interval in MI, MN, MT, ND, SD, WI, and WY.

[2] 9 month interval in ID, OR, and WA.

[3] 18 month interval in ID, UT, and in area East of Cascade Mountains in OR and WA.
[4] 18 month interval in CO, MI, MN, MT, NE (Panhandle counties), ND, SD, WI, and WY.
[5] 9 month interval in area West of Cascade Mountains in OR and WA.

VII. CROP USE DIRECTIONS

CORN (Sweet)

AMV 87181 can be selectively applied to emerged weeds in all corn types including conventional hybrids and all hybrids which contain herbicide-resistant traits. In addition, AMV 87181 may be applied on inbred lines used in sweet corn seed production. Refer to seed company recommendations before application of AMV 87181 on inbred lines.

AMV 87181 may be used in tank mixtures or sequential applications with other herbicides that are registered for use in sweet corn. If AMV 87181 is tank mixed with other products, follow the label restrictions (including adjuvant recommendations) for the most restrictive of the tank mix products. See **Section III** for adjuvant recommendations.

For best performance, a tank-mixture of AMV 87181 with atrazine at 0.25 to 1.5 pound per acre is recommended. Lower atrazine rates (0.25 to 0.5 pound per acre) provide enhanced control (takedown) of emerged weeds, while rates of 1.0 pound per acre and higher provide additional soil residual control and potentially a second effective mode of action to manage weed resistance.

Restrictions for Sweet Corn

- Maximum use rate per year: Do not apply more than 0.0438 lbs. of topramezone per acre or the equivalent of 2.0 fl oz of AMV 87181 per acre in sweet corn.
- DO NOT apply AMV 87181 within 45 days of sweet corn harvest.
- DO NOT graze or feed treated sweet corn for at least 45 days after an application of AMV 87181.
- In the event of a crop loss due to weather or other causes, any sweet corn type can be replanted at any time following an application of AMV 87181 herbicide.

Sequential Herbicide Combinations and Uses for Sweet Corn

In addition to the control of many emerged broadleaf weeds, AMV 87181 controls or suppresses the growth of several emerged grass weed species. To target a broader spectrum of emerged grasses, AMV 87181 should be used as a sequential treatment following a residual grass herbicide, or premixtures of these products containing Group 3 or 15 herbicides registered for use on sweet corn. (EPA registration numbers can be found in Section VII.) AMV 87181 can also be used in sequential programs with registered burndown herbicides.

When AMV 87181 is used in sequential applications prior to or following other products containing Group 27 herbicides registered for use on sweet corn, use of a tank mix partner with a different effective mode of action is recommended at full use rate to reduce risk of selection for HPPD resistant weed biotypes.

Tank Mixing Information for Sweet Corn

In tank mixtures with oil-based residual corn herbicides, a reduced rate of MSO at 2 quarts per 100 gallons of water (0.5% v/v) or HSMOC at 1 quart per 100 gallons of water (0.25% v/v) is recommended to minimize potential for temporary foliar necrosis in corn.

When tank-mixing AMV 87181 with surfactant-loaded glyphosate, MSO at rates of 2 to 4 quarts per 100 gallons of water (0.5% to 1.0% v/v) or HSMOC at rates of 1 to 2 quarts per 100 gallons of water (0.25% to 0.5% v/v) is recommended.

In situations, where glyphosate is used in a tank mixture for grass weeds not labeled for control with AMV 87181, and in tank mixtures with any product prohibiting use of MSO or HSMOC or conditions of high temperature and very high humidity, COC at 1% v/v or NIS at 0.25% v/v may replace these adjuvants.

VIII. BETWEEN CROP APPLICATION

FALLOW WEED MANAGEMENT

AMV 87181 may be used as a foliar application to control emerged broadleaf and grass weeds at any time of the year during the period following crop harvest and before the following crop is planted. The following crop may be planted after observing the required interval as defined in the Rotational Crop Restrictions (**Section VI**). Several cover crops used to manage soil erosion, soil fertility, or soil moisture, and which will not be used for grazing or harvest, have shown tolerance to AMV 87181 and may be planted a minimum of 28 days following between-crop applications. Consult AMVAC representatives or university extension personnel for information on tolerance of specific cover crops.

Application Rate and Timing

Apply AMV 87181 as a broadcast spray up to a rate of 2.0 fl oz/A. Best product performance is obtained when weeds are small and actively growing. Thorough coverage of existing weeds is essential, and higher spray volume may be needed for best performance. Sequential application may be made with a minimum of 14 days between applications, but DO NOT exceed the maximum cumulative (between crop application uses) amount of 2.0 fl oz/A of AMV 87181 per year.

IX. SCIENTIFIC NAMES OF WEEDS SPECIFIED IN THIS LABEL

Common Name	Scientific Name		Common Name	Scientific Name
Amaranth, Palmer	*Amaranthus palmeri*		Morningglory, ivyleaf	*Ipomoea hederacea*
Amaranth, Powell	*Amaranthus powellii*		Mustard, wild	*Sinapis arvensis*
Bindweed, Field	*Convolvulus arvensis*			
Barnyardgrass	*Echinochloa crus-galli*		Nightshade, Black	*Solanum nigrum*
Buckwheat, Wild	*Fallopia convolvulus*			
Burcucumber	*Sicyos angulatus*		Nightshade, Eastern	*Solanum ptycanthum*
Canola, Volunteer	*Brassica* sp.		Black Nightshade, Hairy	*Solanum sarrachoides*
Carpetweed	*Mollugo verticillata*		Panicum, Fall	*Panicum dichotomiflorum*
Chickweed, Common	*Stellaria media*		Panicum, Texas	*Urochloa texana*
Crabgrass, Large	*Digitaria sanguinalis*		Pigweed, Prostrate	*Amaranthus blitoides*
Crabgrass, Smooth	*Digitaria ischaemum*		Pigweed, Redroot	*Amaranthus retroflexus*
Cocklebur, Common	*Xanthium strumarium*		Pigweed, Smooth	*Amaranthus hybridus*
Cupgrass, Woolly	*Eriochloa villosa*		Pigweed, Tumble	*Amaranthus album*
Dandelion	*Taraxacum officinale*		Purslane, Common	*Portulaca oleracea*
Devil's-claw	*Proboscidea louisianica*			
Foxtail, Giant	*Setaria faberi*		Pusley, Florida	*Richardia scabra*

Common Name	Scientific Name		Common Name	Scientific Name
Foxtail, Green	*Setaria viridis*		Ragweed, Common	*Ambrosia artemisiifolia*
Foxtail, Yellow	*Setaria pumila*		Ragweed, Giant	*Ambrosia trifida*
Galinsoga, Hairy	*Galinsoga ciliata*		Sandbur, Field	*Cenchrus longispinus*
Goosegrass	*Eleusine indica*		Shattercane	*Sorghum bicolor*
Henbit	*Lamium amplexicaule*		Shepherd's-purse	*Capsella bursa-pastoris*
Jimsonweed	*Datura stramonium*		Sida, Prickly	*Sida spinosa*
Johnsongrass	*Sorghum halepense*		Signalgrass, Broadleaf	*Urochloa platyphylla*
Kochia	*Kochia scoparia*		Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Ladysthumb	*Polygonum persicaria*		Sunflower, Wild (common)	*Helianthus annuus*
Lambsquarters, Common Lettuce, Prickly	*Chenopodium album* *Lactuca serriola*		Thistle, Canada	*Cirsium arvense*
Mallow, Common	*Malva neglecta*		Thistle, Russian	*Salsola iberica*
Mallow, Venice	*Hibiscus trionum*		Velvetleaf	*Abutilon theophrasti*
Marestail (Horseweed)	*Conyza canadensis*		Waterhemp, Common	*Amaranthus rudis*
Millet, Wild-Proso	*Panicum miliaceum*		Waterhemp, Tall	*Amaranthus tuberculatus*
Morningglory, entireleaf	*Ipomoea hederacea*			

STORAGE AND DISPOSAL

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

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 must 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 HANDLING: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank and store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; and (b) 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. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE.

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