



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

91234-184

Date of Issuance:

10/2/19

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

A319.03

Name and Address of Registrant (include ZIP Code):

Maryanne Geisbush  
Atticus, LLC  
c/o Pyxis Regulatory Consulting Inc.  
4110 136<sup>th</sup> St Ct. NW  
Gig Harbor, WA 98332

**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.

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 conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

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

Signature of Approving Official:

Shaja B. Joyner, Product Manager 20  
Fungicide-Herbicide Branch  
Registration Division 7505P

Date:

10/2/19

2. You are required to comply with the data requirements described in the DCI identified below:

a. Flumioxazin GDCI-129034-1236

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

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

- Revise the EPA Registration Number to read, “EPA Reg. No. 91234-184.”

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 the Federal Insecticide Fungicide and Rodenticide Act 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) list 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 you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 5/13/2019

If you have any questions, please contact Nathan Mellor by phone at 703-347-8562, or via email at [mellor.nathan@epa.gov](mailto:mellor.nathan@epa.gov).

Enclosure

[Note to reviewer: [Text] in brackets denotes optional or explanatory language  
 [Note to reviewer: {Text} in braces denotes where in the final label text will appear  
 {BOOKLET FRONT PANEL LANGUAGE}]

CLORANSULAM-METHYL	GROUP	2	HERBICIDE
FLUMIOXAZIN	GROUP	14	HERBICIDE

# A319.03 [™]

[Alternate Brand Name: Zaltus FR]

Contains flumioxazin and cloransulam-methyl, the active ingredient used in [Surveil®].

[For Preplant and Preemergent Control of Certain Weeds in Herbicide Tolerant and Conventional Soybeans.]  
 [WDG-Water Dispersible Granules]

ACTIVE INGREDIENTS:	(% by weight)
Cloransulam-methyl	
N-(2-carbomethoxy-6-chlorophenyl)-5-ethoxy-7-fluoro(1,2,4)triazolo-[1,5-c]pyrimidine-2-sulfonamide.....	12.0%
Flumioxazin	
2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione.....	36.0%
<b>OTHER INGREDIENTS:</b> .....	<b>52.0%</b>
<b>TOTAL</b> .....	<b>100.0%</b>

## KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

See inside label booklet for First Aid, Precautionary Statements and Directions for Use.

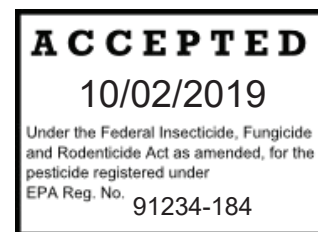
[A319.03™] is not manufactured, or distributed by Dow AgroSciences, seller of [Surveil®].

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Weight:

Manufactured for:  
**Atticus, LLC**  
 5000 CentreGreen Way, Suite 100  
 Cary, NC 27513



## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>	
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment information.	

**For Chemical Emergency:  
Spill, Leak, Fire, Exposure, or Accident,  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

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

Causes moderate eye irritation. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

#### **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as butyl rubber (≥14 mils), or natural rubber (≥14 mils), or neoprene rubber (≥14 mils) or nitrile rubber (≥14 mils)
- Shoes plus socks

### **USER SAFETY REQUIREMENTS**

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.

#### **USER SAFETY RECOMMENDATIONS**

##### **USERS SHOULD:**

- Remove clothing/PPE 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 non-target plants and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to

non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

Cloransulam-methyl and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Cloransulam-methyl can contaminate surface water through spray drift.

Under some conditions, cloransulam-methyl, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks postapplication. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips and areas over-laying tile drainage systems that drain to surface water.

### **PHYSICAL OR CHEMICAL HAZARDS**

Do not mix or allow coming into contact with oxidizing agents, hazardous chemical reaction may occur.

## **DIRECTIONS FOR USE**

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

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

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 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, shoes plus socks.

### **PRODUCT INFORMATION**

**A319.03** herbicide is designed for preplant or preemergence control of broadleaf and grass weeds in herbicide tolerant and conventional soybeans.

Moisture is necessary to activate **A319.03** in soil for residual weed control. Dry weather following applications of **A319.03** may reduce effectiveness. However, when adequate moisture is received after dry conditions, **A319.03** will control susceptible germinating weeds. **A319.03** may not control weeds that germinate after application but before

an activating rainfall/irrigation or weeds that germinate through cracks resulting from dry soil. When adequate moisture is not received after a **A319.03** application, weed control may be improved by irrigation with at least 1/2 inch of water within 7 days of application. If emerged weeds are controlled by cultivation, residual weed control will be reduced.

**Important:** Crop injury may occur from applications made to poorly drained soils and/or applications made under cool, wet conditions. Risk of crop injury can be minimized by using on well drained soils, planting at least 1.5 inches deep, using high quality seed and completely covering seeds with soil prior to preemergence applications. Treated soil that is splashed onto newly emerged crops may result in temporary crop injury.

#### **Use Precautions and Restrictions**

- **Do not** apply this product through any type of irrigation system.
- **Do not** apply this product when weather conditions favor spray drift from treated areas.
- **Do not** graze treated fields or feed treated forage or hay to livestock.
- When applying by air, observe drift management restrictions and precautions listed under “Aerial Application”.
- **Do not** apply **A319.03** by air in the state of New York.

#### **Mandatory Spray Drift Requirements**

##### Aerial Applications

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

##### Ground Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

##### Boom-less Ground Applications

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 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  
Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. 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. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- 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.
- Boom-less Ground Applications:  
Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.
- Handheld Technology Applications:  
Take precautions to minimize spray drift.

**ROTATIONAL RESTRICTIONS**

**The following rotational crops may be planted after applying A319.03 at the listed rate. Planting earlier than the directed rotational interval may result in crop injury.**

Crops	Rotational Interval (Months) <sup>1,2</sup>
Soybean	Immediately
Wheat	3

Crops	Rotational Interval (Months) <sup>1,2</sup>
Field Corn, Popcorn, Seed Corn <sup>3</sup> , Cotton, Peanuts, Rice, Sorghum, Dry Beans, Lima Beans, Oats, Peas, Snap Beans	9
Alfalfa	10
Potatoes, Sweet corn	18
Sugar Beets, Sunflowers, Tobacco <sup>4</sup>	30

<sup>1</sup>Hybrid Seed Production: Corn inbred lines grown for hybrid seed production may be injured during the growing season following an application of **A319.03**. Inbred lines must be thoroughly tested for crop tolerance before rotating to large acreage. While growers are not prohibited from rotating to seed corn in the growing season following an application of **A319.03**, to the extent consistent with applicable law, **Atticus, LLC will not accept responsibility for any crop injury on field corn grown for seed following an application of A319.03.**

<sup>2</sup>Transplanted tobacco may be planted 10 months after application of 2.1 oz/A of **A319.03** (0.016 lb ai cloransulam-methyl/0.047 lb ai flumioxazin). Tobacco in seedbed nurseries may be planted 18 months after application of 2.1 oz/A of **A319.03** (0.016 lb ai cloransulam-methyl/0.047 lb ai flumioxazin) and following a successful field bioassay. A rotational interval of 30 months and a successful field bioassay is required for all **A319.03** applications greater than 2.1 oz/A (0.016 lb ai cloransulam-methyl/0.047 lb ai flumioxazin).

<sup>3</sup>At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

<sup>4</sup>Successful soil bioassay must be performed prior to planting canola, sugar beets and other crops not listed.

## REPLANTING INSTRUCTIONS

If the initial planting of soybeans fails to produce a uniform stand, soybeans may be replanted in fields treated with **A319.03** alone. **Do not** re-treat fields with a second application of **A319.03**. When tank-mixing with a labeled product, refer to replant instructions for that product. **Do not** replant treated fields with any crop at intervals that are inconsistent with the rotational crop guidelines on the label for **A319.03**.

## FIELD BIOASSAY INSTRUCTIONS

Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field previously treated with **A319.03**. Plant the strips perpendicular to the direction **A319.03** was applied. The strips must be located so that different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, or yield reduction, the field can be seeded with the test crop. If visible injury or stand reduction occurs, the test crop must not be seeded, and the bioassay must be repeated the next growing season.

## WEED RESISTANCE MANAGEMENT

For resistance management, please note that **A319.03** contains both a Group 2 and a Group 14 herbicide. Any weed population may contain plants naturally resistant to Group 2 and/or Group 14 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. Users should scout before and after application.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance:

- Avoid the consecutive use of **A319.03** or other target site of action Group 2 and/or Group 14 herbicides that might have a similar target site of action, on the same weed species. Rotate the use of **A319.03** or other Group 2 and/or 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides).



- 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 their growth state to determine if the intended application will be effective.
- Scout after herbicide application 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 species. If resistance is suspected, prevent weed seed production in the affected area by 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 by planting clean seed.
- 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 mode of action, if available.
- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

Additional Best Management Practices include:

- Plant into weed-free fields and keep fields as weed-free as possible.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and postharvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. Do not use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.

Report any incidence of non-performance of this product against a particular weed species to your Atticus, LLC retailer, representative or call 984-465-4754. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production.

Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these MOAs have been found in your region. **Do not** assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

## **BURNDOWN APPLICATIONS**

For best results, it is advised **A319.03** be applied as part of a burndown program to actively growing weeds. Applying **A319.03** under conditions that **do not** promote active weed growth will reduce herbicide effectiveness. **Do not** apply **A319.03** when weeds are under stress due to drought, excessive water, extremes in temperature, disease, or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. **A319.03** is most effective when applied under warm sunny conditions. Reduced residual weed control may occur when burndown applications are made to fields where heavy crop and/or weed residue exist.

## **RAINFASTNESS**

**A319.03** is rainfast two hours after application. Applications made less than two hours prior to rain may result in reduced efficacy.

## **SOIL CHARACTERISTICS**

Application of **A319.03** to soils with high organic matter and/or high clay content may require higher dosages than soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

**CARRIER VOLUME AND SPRAY PRESSURE** (Ground Equipment only. See Information for Aerial Equipment under "Aerial Application".)

## **PRE-EMERGENCE APPLICATIONS (CONVENTIONAL TILLAGE)**

To ensure uniform coverage, use 10 to 30 gal. spray solution per acre for conventional tillage applications. Nozzle selection must meet manufacturer's gallonage and pressure specifications for preemergence herbicide application.

## **BURNDOWN APPLICATIONS (PRIOR TO CROP EMERGENCE)**

To ensure thorough coverage in burndown applications, use 15 to 30 gal. spray solution per acre. Use 20 to 30 gal. per acre if dense vegetation or heavy crop residue is present. Nozzle selection must meet manufacturer's gallonage and pressure specifications for postemergence herbicide application.

## **ADDITIVES**

### **BURNDOWN APPLICATIONS (PRIOR TO CROP EMERGENCE)**

Postemergence control of weeds from **A319.03** requires the addition of an agronomically approved adjuvant to the spray mixture. Either a crop oil concentrate or methylated seed oil which contains at least 15% emulsifiers and 80% oil, or a non-ionic surfactant at 0.25% v/v, may be used when applying **A319.03** as part of a burndown program. Some tank mix partners, for example Durango DMA (glyphosate), are formulated with sufficient adjuvants and **do not** require the addition of a crop oil concentrate, methylated seed oil, or a non-ionic surfactant at 0.25% v/v, when tank mixed with **A319.03**. An exception to this may be when tank mix products are applied at spray volumes in excess of 20 gal. per acre. Always check tank mix product label or manufacturer representative for adjuvant directions under elevated spray volume applications as additional adjuvants may be suggested. The addition of a crop oil concentrate, methylated seed oil or a non-ionic surfactant at 0.25% v/v may increase the burndown activity on certain weeds for example cutleaf eveningprimrose and Carolina geranium. Mixing compatibility qualities must be verified by a jar test.

A spray grade nitrogen source (either ammonium sulfate at 2.0 to 2.5 lbs/A or a 28 to 32% nitrogen solution at 1 to 2 qts/A) may be added to the spray mixture along with either a crop oil concentrate, methylated seed oil or non-ionic surfactant to enhance weed control. The addition of a nitrogen source does not replace the need for a crop oil concentrate or a methylated seed oil.

### JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND A319.03

1. When using **A319.03** and an adjuvant for the first time (or a new water source is being used), including in stale seed bed or reduce tillage situations, a jar test must be performed before mixing commercial quantities of **A319.03**.
2. Add 1 pt of the water to a quart jar to simulate 10 gal. per acre water volume. The water must be from the same source and temperature as which will be used in the spray tank mixing operation.
3. Add 1 g of **A319.03** to the quart jar for every 3 oz/A of **A319.03** being applied (1 g if 3 oz/A is the desired **A319.03** rate). Gently mix until product goes into suspension.
4. Add other products in this order: dry flowables (WGs), suspension concentrates (SCs), emulsifiable concentrates (ECs). Gently mix until product(s) go into suspension/emulsification.
5. Add 60 ml (4 Tbsp or 2 fl oz) of the crop oil of methylated seed oil or 1 ml of a non-ionic surfactant if it is being used in place of oil to the quart jar, gently mix.
6. If nitrogen is being used, add 16 ml (1 Tbsp or 0.5 oz) of the 28 to 32% nitrogen source to the quart jar. If ammonium sulfate is being used, add 19 g AMS to the quart jar in place of the 28 to 32% nitrogen.
7. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.
8. An ideal tank mix combination will be uniform and free of suspended particles. If any of the following conditions are observed the choice of adjuvant must be questioned:
  - Layer of oil or globules on the mixture's surface.
  - Flocculation: fine particles in suspension or as a layer on the bottom of the jar.
  - Clabbering: Thickening texture (coagulated) like gelatin.

### SPRAYER PREPARATION

Before applying **A319.03**, start with clean, well-maintained application equipment. The spray tank, as well as all hoses and booms, must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. Some pesticides, including but not limited to, the sulfonylurea and phenoxy herbicides, (e.g. Chlorimuron Ethyl and 2,4-D, respectively) are active at very small amounts and can cause crop injury when applied to susceptible crops. The spray equipment must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply **A319.03**. If two or more products were tank mixed prior to **A319.03** application, the most restrictive cleanup procedure must be followed.

### MIXING INSTRUCTIONS

1. Do not add any liquid fertilizers, micronutrients or adjuvants to the spray solution until after the **A319.03** has been added to the tank and fully dispersed. Please ensure agitation is continuous throughout tank mixing preparation and application. Fill clean spray tank 1/2 to 2/3 of desired level with clean water while agitating, add the correct amount of **A319.03** and make sure the granules have dispersed completely before proceeding. Agitation must create a rippling or rolling action on the water surface.
2. If tank mixing **A319.03** with other labeled herbicides, add water soluble bags first, followed by dry formulations (WG's), flowables (SC, SE, CS), emulsifiable concentrates (EC), and then solutions (SL). Prepare no more spray mixture than is required for the immediate spray operation. If tank mixing paraquat (e.g. Gramoxone Inteon) with **A319.03**, a non-ionic surfactant **MUST** be added **BEFORE** addition of the paraquat containing product. Fill spray tank to desired level with water. **Continue agitation until all spray solution has been applied.**

Mix only the amount of spray solution that can be applied the day of mixing. **A319.03** must be applied within 6 hours of mixing.

### SPRAYER CLEANUP

Spray equipment must be cleaned each day following **A319.03** application. After **A319.03** is applied, the following steps must be used to clean the spray equipment.

1. Completely drain the spray tank and system by removing and emptying all screens and screen housings, hoses and draining booms by removing the boom end caps. Rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.

2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
3. Top off tank, add 1 gal. of 3% household ammonia for every 100 gal. of water, circulate through sprayer for 5 minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If anti-drip diaphragms are being used, loosen them prior to flushing the system, allowing cleaning solution to spray through the open diaphragm. If spray line and booms have end cap, they must be loosened and drained before flushing the system, allowing cleaning solution to spray through the loosened caps. To enhance removal of **A319.03** from the spray system, add a tank cleaner for example "Valent Tank Cleaner" from Valent U.S.A. Corporation, in place of ammonia and allow the cleaning solution to remain in the system (spray tank, hoses and boom) overnight before flushing the system for a minimum of 15 minutes.
4. Drain tank completely.
5. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.
6. Remove all nozzles and screens and rinse them in clean water.

Spray equipment, including all tanks, hoses, booms, screens and nozzles, must be thoroughly cleaned before it is used to apply postemergence pesticides. Equipment with **A319.03** residue remaining in the system may result in crop injury to the subsequently treated crop.

#### **APPLICATION EQUIPMENT**

Application equipment must be clean and in good repair. Nozzles must be uniformly spaced on boom and frequently checked for accuracy.

#### **BROADCAST APPLICATION**

Apply **A319.03** and **A319.03** tank mixes with ground equipment using standard commercial sprayers equipped with flat fan or flood nozzles (preemergence applications only) designed to deliver the desired spray pressure and spray volume.

#### **BAND APPLICATION**

When banding, use proportionately less water and **A319.03** per acre.

#### **AERIAL APPLICATION**

**[Do not apply A319.03 by air in the state New York.]**

Spray drift away from the site of application may cause damage to non-target vegetation. To minimize drift, apply the largest droplet size consistent with uniform coverage and satisfactory weed control. To obtain satisfactory application and avoid drift, the following directions must be observed:

- **Do not** apply during low-level inversion conditions, when winds are gusty, or under other conditions that favor drift. **Do not** spray when wind velocity is less than 2 mph or more than 10 mph.
- **Do not** apply this product by air within 40 ft of non-target plants including non-target crops.
- **Do not** apply this product by air within 100 ft of emerged cotton crops.
- **Do not** apply this product by air within 40 ft of streams, wetlands, marshes, ponds, lakes and reservoirs.
- **Carrier Volume and Spray Pressure:** When used as part of a burndown weed control program, apply **A319.03** in 7 to 10 gal. of water per acre. Application at less than 7 gal. per acre may provide inadequate control. When used for preemergence weed control, apply **A319.03** in 5 to 10 gal. per acre of water. The higher gallonage applications afford more consistent weed control. **Do not** exceed the nozzle manufacturer's directed pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Nozzle Selection and Orientation:** Formation of very small drops may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray pressure. Use nozzles, which produce flat or hollow cone spray patterns. Use non-drip type nozzles, for example diaphragm type nozzles, to avoid unwanted discharge of spray solution. The nozzles must be directed toward the rear of the aircraft, at an angle between 0 and 15° downward. **Do not** place nozzles on the outer 25% of the wings or rotors.

- **Adjuvants and Drift Control Additives:** Refer to tank mix partner’s label for adjuvant directions. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

**DIRECTIONS FOR USE IN SOYBEANS**

**Restrictions**

- **Do not** apply more than 4.2 oz of **A319.03** (0.032 lb ai cloransulam-methyl/0.095 lb ai flumioxazin) per acre per year.
- **Do not** apply more than 4.2 oz of **A319.03** (0.032 lb ai cloransulam-methyl/0.095 lb ai flumioxazin) per acre per application.
- **Do not** make more than one (1) application per year.
- **Do not** perform any tillage operation after application or residual weed control will be reduced.
- **Do not** tank-mix **A319.03** with Group 15 herbicides, including acetochlor, alachlor, flufenacet, metolachlor, dimethenamid-P, or pyroxasulfone, within 14 days of planting soybeans, unless soybeans are planted under no till or minimum tillage conditions on wheat stubble or no till field corn stubble.
- **Do not** irrigate when soybeans are cracking.

**FALL BURNDOWN PROGRAMS IN SOYBEANS**

**A319.03** can be used in combination with labeled preplant burndown herbicides to control emerged weeds and provide residual weed control in fields that will be planted the following spring. Application must be made no earlier than October 15 in Region 2 or November 15 in Region 1 or when soil temperature falls below 50° F at a 2 inch depth to maintain residual weed control into the spring (April 1 in Region 1 and May 1 in Region 2) or up until planting, whichever comes first.

**RESTRICTIONS AND LIMITATIONS FOR FALL BURNDOWN PROGRAMS**

- **Do not** apply to frozen or snow covered soil.
- Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

**Fall Application Regions:**

Region 1: Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia

Region 2: Colorado, Connecticut, Delaware, Kansas, Illinois, Indiana, Iowa, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, South Dakota, Wisconsin, and Wyoming

Weeds controlled by postemergence or residual activity, are listed in Table 1. Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels. It is the pesticide user’s responsibility to ensure that all products in the mixture are registered for the intended uses. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Preplant burndown treatment tank-mixes and rates are:

<b>Herbicide</b>	<b>Rate</b>
<b>Program 1</b>	
<b>A319.03 Plus</b>	3.5 to 4.2 oz/A (0.026 – 0.032 lb ai cloransulam-methyl/0.079 0.095 lb ai flumioxazin)
Glyphosate <b>Plus</b>	Refer to tank mix product label
2,4-D LVE (2,4-D for use on preplant soybeans only) <b>Plus</b>	Refer to tank mix product label
NIS + AMS	0.5% v/v + 17 lb/100 gal. of water

OR

<b>Program 2</b>	
<b>A319.03 Co-Pack Plus</b>	3.5 to 4.2 oz/A (0.026 – 0.032 lb ai cloransulam-methyl/0.079 0.095 lb ai flumioxazin)
Glyphosate Plus	Refer to tank mix product label
COC <sup>1</sup> or NIS + AMS	1 pt/A or 0.5% v/v + 17 lb/100 gal. of water

OR

<b>Program 3</b>	
<b>A319.03 Co-Pack Plus</b>	3.5 to 4.2 oz/A (0.026 – 0.032 lb ai cloransulam-methyl/0.079 0.095 lb ai flumioxazin)
2,4-D LVE (2,4-D for use on preplant soybeans only) Plus	Refer to tank mix product label
COC	1 pt/A

<sup>1</sup>Crop oil concentrate has been found to increase glyphosate burndown on emerged cutleaf evening primrose or Carolina geranium.

#### **SPRING BURNDOWN PROGRAMS-PREEMERGENCE TO SOYBEANS, POSTEMERGENCE TO WEEDS**

**A319.03**, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where soybeans will be planted directly into a stale seedbed, cover crop or in previous crop residues. For control of emerged weeds, choose the most appropriate tank mix partner from Table 4 or in tank mix combination with other herbicides registered for preplant and preemergence use in soybean. Apply **A319.03** with ground equipment before planting, during planting or within 3 days after planting, **but before the crop emerges**. To ensure thorough coverage, use a minimum of 15 gal. of spray solution per acre. Refer to tank mix partner's label for application pressure. All **A319.03** tank mixes applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 to 2 pt/A.

**A319.03** can be used in combination with labeled preplant burndown herbicides to control emerged weeds and provide residual weed control prior to crop emergence. Weeds controlled by residual activity are listed in Table 2, Section A and Section B.

No-till planters that incorporate the soil during planting may result in decreased weed control in the row. Apply **A319.03** after planting when these types of planters are used (within 3 days of planting and before the crop emerges).

Based upon soil characteristics (organic matter content and texture), the most difficult to control weed species being targeted and the crop being grown, select the proper **A319.03** dosage from Table 2. Table 3 lists weeds that are suppressed by **A319.03**.

#### **PREPLANT AND PREEMERGENCE APPLICATION**

**A319.03** may be applied to soybeans prior to planting or preemergence (after planting). Preemergence applications of **A319.03** must be made within 3 days after planting and prior to soybean emergence. Application after the soybeans have begun to crack or are emerged will result in severe crop injury. Application should not be made when soybeans have begun to crack. Select **A319.03** rate from Table 2 according to anticipated weed spectrum.

**Table 1. Weeds Controlled by Fall and Spring Preplant Burndown Programs**

Weeds Controlled <sup>1</sup>		Postemergence			Residual
Common Name	Scientific Name	Program 1	Program 2	Program 3	
		Weeds 3 inches or less			
Chickweed					
Common	<i>Stellaria media</i>	Yes	Yes	No	Yes
Mouseear	<i>Cerastium vulgatum</i>	Yes	Yes	No	Yes
Dandelion	<i>Taraxacum officinale</i>	Yes	No	Yes <sup>2</sup>	Yes
Henbit	<i>Lamium amplexicaule</i>	Yes	Yes	Yes	Yes
Marestail/Horseweed	<i>Conyza canadensis</i>	Yes	Yes <sup>3</sup>	Yes	Yes
Groundsel, Cressleaf	<i>Senecio glabellus</i>	Yes	Yes	-	Yes
Purple Deadnettle	<i>Lamium purpureum</i>	Yes	Yes	Yes	Yes
Weeds 12 inches or less					
Carolina Geranium	<i>Geranium carolinianum</i>	Yes	Yes	Yes	-
Eveningprimrose, Cutleaf <sup>4</sup>	<i>Oenothera laciniata</i>	Yes	Yes	Yes	Yes
Mustard, Wild	<i>Brassica kaber</i>	Yes	Yes	Yes	Yes
Shepherd's-purse	<i>Capsella bursapastoris</i>	Yes	Yes	Yes	Yes

<sup>1</sup>Refer to glyphosate and/or 2,4-D labels for additional weeds controlled and rotational restrictions.

<sup>2</sup>Refer to 2,4-D LVE label rates for control of emerged dandelion.

<sup>3</sup>Program 2 will not control populations of marestail with multiple resistance to both glyphosate and ALS inhibitor herbicides.

<sup>4</sup>Program 1 must be used to control cutleaf eveningprimrose that are nearing 12 inches in height or are past the rosette stage. Programs 2 or 3 must be used to control cutleaf eveningprimrose that are 12 inches or less and in the rosette stage.

### Weed Control In Soybeans

Table 2 lists broadleaf weeds controlled by residual activity of **A319.03** in soybeans.

Table 3 list weeds suppressed by residual activity of **A319.03** in soybeans.

**Table 2. Broadleaf Weeds Controlled by Residual Activity of A319.03**

Broadleaf Weed Species				
Section A				
Common Name	Scientific Name	Organic Matter	Soil Type	A319.03 Rate
Carpetweed	<i>Mollugo verticillate</i>	Up to 5%	All Soil Types	3.5 oz/A (0.026 lb ai cloransulam- methyl/0.079 lb ai flumioxazin)
Chickweeds				
Common	<i>Stellaria media</i>			
Mouseear	<i>Cerastium vulgatum</i>			
Dandelion	<i>Taraxacum officinale</i>			
Eclipta	<i>Eclipta prostrata</i>			
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>			
Florida Pusley	<i>Richardia scabra</i>			
Hemp Sesbania	<i>Sesbania exaltata</i>			
Henbit	<i>Lamium amplexicaule</i>			
Jimsonweed	<i>Datura stramonium</i>			
Kochia	<i>Kochia scoparia</i>			
Lambsquarters, Common	<i>Chenopodium album</i>			
Little Mallow	<i>Malva parviflora</i>			
Marestail/Horseweed	<i>Conyza canadensis</i>			

Broadleaf Weed Species				
Section A				
Common Name	Scientific Name	Organic Matter	Soil Type	A319.03 Rate
Morningglories				
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>			
Ivyleaf	<i>Ipomoea hederacea</i>			
Pitted	<i>Ipomoea lacunosa</i>			
Red/Scarlet	<i>Ipomoea coccinea</i>			
Tall	<i>Ipomoea purpurea</i>			
Mustard, Wild	<i>Brassica kaber</i>			
Nightshades				
Black	<i>Solanum nigrum</i>			
Eastern Black	<i>Solanum ptycanthum</i>			
Hairy	<i>Solanum sarrachoides</i>			
Pigweeds				
Redroot	<i>Amaranthus retroflexus</i>			
Smooth	<i>Amaranthus hybridus</i>			
Spiny Amaranth	<i>Amaranthus spinosus</i>			
Tumble	<i>Amaranthus albus</i>			
Palmer Amaranth	<i>Amaranthus palmeri</i>			
Prickly Sida (Teaweed)	<i>Sida spinosa</i>			
Puncturevine	<i>Tribulus terrestris</i>			
Purslane, Common	<i>Portulaca oleracea</i>			
Ragweeds, Common <sup>2</sup>	<i>Ambrosia artemisiifoli</i>			
Redmaids	<i>Calandrinia ciliata</i> var. <i>menziessi</i> .			
Shepherd's-purse	<i>Capsella bursa-pastoris</i>			
Smallflower				
Morningglory	<i>Jacquemontia tamnifolia</i>			
Smartweeds				
Ladysthumb	<i>Polygonum persicaria</i>			
Pennsylvania	<i>Polygonum pensylvanicum</i>			
Spurge, Spotted	<i>Euphorbia maculata</i>			
Velvetleaf	<i>Abutilon theophrasti</i>			
Venice Mallow	<i>Hibiscus trionum</i>			
Waterhemp <sup>1</sup>	<i>Amaranthus tuberculatus</i>			

Section B				
All weeds listed in Section A plus:				
Common Name	Scientific Name	Organic Matter	Soil Type	A319.03 Rate
Bristly Starbur	<i>Acanthospermum hispidum</i>	Up to 5%	All Soil Types	4.2 oz/A (0.032 lb ai cloransulam- methyl/0.095 lb ai flumioxazin)
Cocklebur, Common	<i>Xanthium strumarium</i>			
Coffee Senna	<i>Cassia occidentalis</i>			
Copperleaf				
Hophornbeam	<i>Acalypha ostryifolia</i>			
Virginia	<i>Acalypha virginica</i>			
Golden Crownbeard	<i>Verbesina encelioides</i>			
Florida Beggarweed	<i>Desmodium tortuosum</i>			
Hairy Indigo	<i>Indigofera hirsuta</i>			
Ragweed, Giant <sup>2</sup>	<i>Ambrosia trifida</i>			
Russian Thistle	<i>Salsolia iberica</i>			



Section B				
All weeds listed in Section A plus:				
Common Name	Scientific Name	Organic Matter	Soil Type	A319.03 Rate
Spurred Anoda	<i>Anoda cristata</i>			
Tropic Croton	<i>Croton glandulosus</i>			
Wild Poinsettia	<i>Euphorbia heterophylla</i>			

<sup>1</sup>A postemergence herbicide, including Lactofen, Calcium Carbonate and Calcium, or glyphosate (Roundup Ready soybeans only) may be needed following a preemergence application of **A319.03** to adequately control waterhemp and Palmer amaranth in soybean fields with heavy pressure.

<sup>2</sup>Does not include ALS resistant common or giant ragweeds.

**Table 3. Weeds Suppressed by Residual Activity of A319.03 in Soybeans**

Grass Weed Species		Organic Matter	Ounces per Acre
Common Name	Scientific Name		
Barnyardgrass	<i>Echinochloa crusgalli</i>	All Soil Types	3.5 to 4.2 oz/A (0.026 lb ai cloransulam-methyl/0.079 lb ai flumioxazin – 0.032 lb ai cloransulam-methyl/0.095 lb ai flumioxazin)
Crabgrass, Large	<i>Digitaria sanguinalis</i>		
Foxtail, Giant	<i>Setaria faberi</i>		
Goosegrass	<i>Eleusine indica</i>		
Lovegrass, California	<i>Eragrostis diffusa</i>		
Panicums			
Fall	<i>Panicum dichotomiflorum</i>		
Texas	<i>Panicum texanum</i>		
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>		

## TANK MIXES

**A319.03** may be tank mixed with the herbicides listed in Table 4 for increased burndown activity, additional residual broadleaf, and/or additional grass control. Refer to tank mix partner's label for adjuvant directions. Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended uses. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Table 4. Tank Mix Partners for Control of Emerged Weeds in Reduced Tillage Soybeans**

Tank Mix Partner	Target Weeds <sup>1</sup>
Paraquat dichloride, other paraquat products <sup>2</sup>	<ul style="list-style-type: none"> <li>• General Burndown</li> <li>• Henbit</li> </ul>
Glyphosate: N-(phosphonomethyl)glycine, dimethylamine salt	<ul style="list-style-type: none"> <li>• General Burndown</li> </ul>
Glufosinate-ammonium	<ul style="list-style-type: none"> <li>• General Burndown</li> </ul>
2,4-D LVE	<ul style="list-style-type: none"> <li>• Marestail</li> <li>• Giant Ragweed</li> <li>• Dandelion</li> </ul>
Dicamba	<ul style="list-style-type: none"> <li>• Marestail</li> <li>• Giant Ragweed</li> <li>• Dandelion</li> </ul>

<sup>1</sup>Refer to tank mix product labels for specific directions for control of emerged weeds present.

<sup>2</sup>Please refer to the specific mixing order instructions for paraquat products in the Mixing Instructions portion of the label

## ADDITIONAL RESIDUAL BROADLEAF CONTROL

**A319.03** can be tank mixed with metribuzin for additional broadleaf control.

**ADDITIONAL RESIDUAL GRASS CONTROL**

**A319.03** can be tank mixed with pendimethalin or clomazone for additional grass control.

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed. A319.03, when applied according to label use directions, will control the weeds listed in Table 2. This label makes no claims concerning control of other weed species.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store this product only in its original container in a dry, cool, secured storage area. Store this product above 32°F to avoid crystallization. If crystals form or product freezes, move product to area with ambient temperature above 32°F and shake well until crystals have dissolved.

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 HANDLING:

**[For plastic containers ≤ 5 gallons: Nonrefillable Container:** Do not reuse or refill this container. Triple rinse container (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 or 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 puncture and dispose of in a sanitary landfill, or by incineration.]

**[For plastic containers > 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

## LIMITATION OF WARRANTY AND LIABILITY

**IMPORTANT: READ BEFORE USE.** Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[A319.03™] is a trademark of Atticus, LLC

[Surveil®] is a registered trademark of [The Dow Chemical Company or an affiliated company of Dow].

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

CLORANSULAM-METHYL	GROUP 2	HERBICIDE
FLUMIOXAZIN	GROUP 14	HERBICIDE

**A319.03™**

[Alternate Brand Name: Zaltus FR]

Contains flumioxazin and cloransulam-methyl, the active ingredient used in [Surveil®].

[For Preplant and Preemergent Control of Certain Weeds in Herbicide Tolerant and Conventional Soybeans.]

[WDG-Water Dispersible Granules]

**ACTIVE INGREDIENTS:** (% by weight)

Cloransulam-methyl	
N-(2-carbomethoxy-6-chlorophenyl)-5-ethoxy-7-fluoro(1,2,4)triazolo-[1,5-c]pyrimidine-2-sulfonamide.....	12.0%
Flumioxazin	
2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione.....	36.0%
<b>OTHER INGREDIENTS:</b> .....	52.0%
<b>TOTAL</b> .....	100.0%

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

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	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment information.	

**For Chemical Emergency:**

**Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

- Causes moderate eye irritation
- Avoid contact with eyes or clothing
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet

**ENVIRONMENTAL HAZARDS:** This product is toxic to non-target plants and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

Cloransulam-methyl and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Cloransulam-methyl can contaminate surface water through spray drift.

Under some conditions, cloransulam-methyl, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post application. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips and areas over-laying tile drainage systems that drain to surface water.

**PHYSICAL OR CHEMICAL HAZARDS:** Do not mix or allow coming into contact with oxidizing agents, hazardous chemical reaction may occur.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store this product only in its original container in a dry, cool, secured storage area. Store this product above 32°F to avoid crystallization. If crystals form or product freezes, move product to area with ambient temperature above 32°F and shake well until crystals have dissolved.

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 HANDLING:**

**[For plastic containers ≤ 5 gallons:** Nonrefillable Container: Do not reuse or refill this container. Triple rinse container (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 or 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 puncture and dispose of in a sanitary landfill, or by incineration.]

**[For plastic containers > 5 gallons:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

[A319.03™] is not manufactured, or distributed by [Dow AgroSciences], seller of [Surveil®].

Manufactured for:  
**Atticus, LLC**  
 5000 CentreGreen Way, Suite 100  
 Cary, NC 27513

**EPA Reg. No.: 91234-XX**  
**EPA Est. No.:** \_\_\_\_\_  
**NET WEIGHT:** \_\_\_\_\_