STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

November 4th, 2026

Re: Risk Assessment overview for three new active ingredients

To: Maine Board of Pesticide Control

Dear Members of the Maine Board of Pesticides Control-

I have reviewed the toxicological profile of the three newly approved active ingredients: diflufenican, fluoxapiprolin, and trifludimoxazin. These active ingredients represent new options for Maine farmers and growers who seek to control pests and should be integrated into a sound IPM strategy. An overview of their environmental and human health risks is presented below.

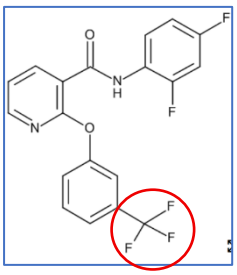
Diflufenican

Diflufenican is an herbicide that inhibits photosynthesis and is therefore highly toxic to plants and algae. Therefore, this active ingredient presents an off-target risk to terrestrial and aquatic plants. However, this risk is minimized if products containing diflufenican are used according to the label. This stems from the herbicide's chemical properties. This includes a low vapor pressure, which prevents it from transitioning into a gas and drifting into the atmosphere. Additionally, its low water solubility and a K_{ow} value >4 means that it is very hydrophobic and will partition to the soil. Thus, the risks of leaching into the groundwater are minimal if applied to soil that has a sand content less than 70%. Similar to all pesticidal active ingredients, the risk of runoff remains a threat if not used according to the label, *i.e.* applications on ledge, standing water, or adverse weather.

Diflufenican is classified as mildly toxic or practically non-toxic to most groups of animals (*e.g.* mammals, birds, bees, and insects). However, it is moderately toxic to fish and therefore presents an environmental concern to these non-target organisms if there is exposure in aquatic ecosystems. There is no evidence that diflufenican is carcinogenic or genotoxic.

This herbicide has a half-life of ~100 days in soils and is therefore categorized as moderately persistent to persistent in soils. Although diflufenican has the potential to bioaccumulate in fish, this is not anticipated if exposure in aquatic systems is prevented. This conclusion is reached because diflufenican has a high binding affinity for soil, which greatly reduces leaching and this risk to fish if used according to the label.

Diflufenican is a PFAS as defined by the State of Maine and the OECD. The molecule possesses a trifluoromethyl groups (CF_3), which is circled in red. This feature means that it can degrade into trifluoroacetate and contaminate aquatic systems. In fact, environmental fate studies in aerobic soil reveal that 5% of the active ingredient can transform into trifluoroacetate (Johnsen et al., 2026). Additionally, EPA documents identified nine degradants that retain the CF_3 group, indicating that the yield of trifluoroacetate could be greater than 5%; however, this has not been experimentally determined.



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EPA identified one metabolite that is more toxic than the original parent molecule, which was categorized as a residue of concern. However, this metabolite is not expected to accumulate to levels that present a health or environmental risk. This conclusion is based on its calculated hazard ratio, which indicates that potential exposure is orders of magnitude lower than a toxicological threshold to terrestrial and aquatic organisms.

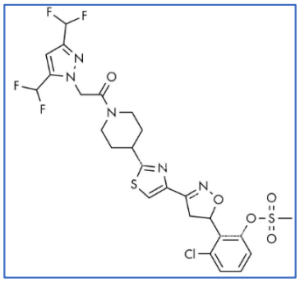
Resistance to diflufenican has been documented. Diflufenican shares a similar mode of action with six other herbicides, and therefore presents an elevated risk of cross-resistance, i.*e.* resistance to one pesticide also confers resistance to the new active ingredient.

Fluoxapiprolin

Fluoxapiprolin is a new tool in fungal management and shares a similar mode of action with oxathiapropalin. Therefore, the Fungicide Resistance Action Committee (FRAC) notes a moderate risk of cross-resistance, i.*e.* resistance to oxathiapropalin also confers resistance to the new active ingredient.

This new active ingredient is categorized as mildly-toxic or practically non-toxic to aquatic and terrestrial animals. Under the request of EPA's Human Effects Division, the Cancer Assessment Review Committee evaluated fluoxapiprolin and deemed it not likely to be carcinogenic to humans (EPA, 2022). According to the EPA, the level of risk associated with fluoxipropalin does not reach a level of concern for aquatic and terrestrial animals; this "no effects" conclusion also extends to species protected under the Endangered Species Act (EPA, 2026).

Fluoxapiprolin is a fluorinated molecule that does not meet PFAS criteria as defined by the State of Maine or OECD. Environmental fate studies reveal six degradants that retain the recalcitrant carbon-fluorine bond. Intriguingly, one metabolite identified as BCS-CS55621 is defluorinated in aerobic soil, anaerobic soil, and aerobic aquatic system; in this case, the difluoromethyl group is replaced by a carboxylic group. This points to the growing body of evidence that several fluorinated active ingredients - including those that are PFAS- are capable of defluorination under both natural conditions and laboratory conditions.



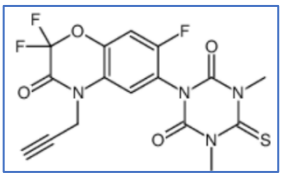
Fifteen dissipation studies document that the half-life of fluoxapiprolin ranges from 10-62 days; a manual analysis of these data reveals a geometric mean of 28 days, suggesting slight to moderate persistence.

Trifludimoxazin

Trifludimoxazin is an herbicide that inhibits photosynthesis and is therefore highly toxic to plants and algae. It is classified as mildly toxic or practically non-toxic to diverse groups of animals (*e.g.* mammals, birds, bees, fish, and insects); if used according to the label, risks to animals is anticipated to be low.

The greatest environmental risk of trifludimoxazin includes non-target effects in terrestrial and aquatic plants. However, this risk is minimized by trifludimoxazin's physiochemical properties. The herbicide's low vapor pressure means that its ability to volatilize- and drift into the atmosphere- under environmentally relevant conditions is practically non-existent. Additionally, its low water solubility and a K_{ow} value >3 means that it will partition to the soil and rather than leach into the groundwater; however, risk of runoff remains a threat to aquatic plants if the pesticidal active ingredient is not used according to the label.

Trifludimoxazin is a PFAS as defined by the State of Maine and the OECD. However, it lacks a trifluoromethyl group (CF_3), which means it will not degrade and contribute to trifluoroacetate accumulation and its potential to contaminate water sources. Environmental fate studies reveal that trifludimoxazin is not persistent in field soil experiments. Nonetheless, EPA dockets indicate that it can degrade into twelve degradants that retain the CF_2 moiety; these metabolites are persistent, but they are not nearly as recalcitrant as metabolites with CF_3 moieties. These degradants are more likely to leach; however, the metabolites are orders of magnitude less toxic than trifludimoxazin. This feature greatly decreases their toxicological profile to aquatic plants if they were to be detected in



Maine's waters. In contrast to heavily fluorinated PFAS molecules, the ability of trifludimoxazin to bioaccumulate in the food chain is negligible.

Please let me know if you have any questions related to my risk assessment.

Respectfully,
Doug Van Hoewyk, PhD



Toxicologist
Maine Board of Pesticide Control

References

EPA. 2020. Trifludimoxazin: Ecological Risk Assessment for the Proposed Section 3 New Chemical Registration. EPA-HQ-OPP-2018-0762-0013

EPA, 2022 Fluoxapiprolin: Report of the Cancer Assessment Review Committee. EPA-HQ-OPP-2022-0980-0016

EPA. 2022. Diflufenican. Report of the Residues of Concern Knowledgebase Subcommittee (ROCKS). EPA-HQ-OPP-2021-0435-0015

EPA. 2025. Diflufenican.Human Health Risk Assessment. EPA-HQ-OPP-2021-0435-0013

EPA. 2025. Diflufenican: Final Environmental Fate and Ecological Risk Assessment (ERA) for the FIFRA Section 3 Registration and Biological Evaluation (BE) with Associated Effects Determinations for Federally Listed Endangered and Threatened Species and Designated Critical Habitat. EPA-HQ-OPP-2021-0435-0048

EPA, 2026 Memorandum Supporting Final Decision to Approve Registration for the New Active Ingredient of Fluoxapiprolin. EPA-HQ-OPP-2022-0980-0027

New Active Ingredients – November 13, 2026

1. Fluoxapiprolin – Group 49 Fungicide
    a. Xivana Prime (264-1226)
        i. Fungicide for control or suppression of crop diseases on brassica head and stem vegetables, bulb vegetables, cucurbit vegetables, fruiting vegetables, leafy vegetables, leaf petiole vegetables, small fruit vine (climbing), and tuberous and corm vegetables
        ii. Bayer Cropscience, LP
        iii. Submitted to Maine August 12, 2026
        iv. Groundwater and Surface Water advisory statements in Environmental Hazards
2. Trifludimoxazin – Group 14 Herbicide
    a. Voraxor (7969-495)
        i. Herbicide for use in corn, legume vegetables, small grains, sorghum, soybean, and in postharvest and fallow
        ii. New active is in formula alongside existing active saflufenacil
        iii. BASF Agricultural Solutions US, LLC
        iv. Submitted to Maine July 24, 2026
        v. Groundwater, Surface Water, Non-target Organism, and pollinator advisory statements in Environmental Hazards
        vi. Endangered and and Threatened Species Protection Requirements section in Directions for Use
    b. Antorix (7969-493)
        i. Herbicide for use as a postemergence-directed broadleaf and grass herbicide in citrus fruit trees, nut trees, and pome fruit trees
        ii. New active is in formula alongside existing active saflufenacil
        iii. BASF Agricultural Solutions US, LLC
        iv. Submitted to Maine July 24, 2026
        v. Groundwater, Surface Water, Non-target Organism, and pollinator advisory statements in Environmental Hazards
        vi. Endangered and and Threatened Species Protection Requirements section in Directions for Use
3. Diflufenican
    a. Convintro (264-1213)
        i. Herbicides for preemergence control of broadleaf weeds on field corn and soybeans
        ii. Bayer Cropscience, LP
        iii. Submitted on July 13, 2026
        iv. Surface Water Advisory in Environmental Hazards
        v. Endangered and Threatened Species Protection Requirements section in Directions for Use

Convintro™

Herbicide

Net Contents:

2.5 Gallons

DIFLUFENICAN	GROUP 12	HERBICIDE

For preemergence control of certain broadleaf weeds on field corn and soybeans

ACTIVE INGREDIENT:	
Diflufenican [N-(2,4-difluorophenyl)-2-[3-(trifluoromethyl)phenoxy]pyridine-3-carboxamide]	**42.01%**
OTHER INGREDIENTS:	**57.99%**
TOTAL:	**100.00%**

Contains 4.17 pounds per U.S. gallon (500 grams per liter) of the active ingredient per U.S. gallon

EPA Reg. No. 264-1213

KEEP OUT OF REACH OF CHILDREN

CAUTION PRECAUCIÓN

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.

Please refer to booklet for additional precautionary statements and directions for use.

For **MEDICAL** and **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours a Day 1-800-334-7577
For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

MIX WELL BEFORE USE

Produced for
Bayer CropScience LLC
800 N. Lindbergh Blvd.
St. Louis, MO 63167
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FIRST AID

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 by mouth to an unconscious person.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
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.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.

In case of emergency, call the toll-free Bayer CropScience Emergency Response telephone number: 1-800-334-7577.

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

Note to Physician: No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Harmful if swallowed or absorbed through the skin.
- Causes moderate eye irritation.
- Avoid contact with skin, eyes or clothing.
- 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 any waterproof material
- Shoes plus socks

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)(e) and (f)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY REQUIREMENTS

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

USER SAFETY RECOMMENDATIONS

- Users must remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users must 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 pesticide is toxic to fish, aquatic invertebrates, oysters and shrimp. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. For terrestrial uses, **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high

water mark. **DO NOT** apply when weather conditions favor drift from areas treated. **DO NOT** contaminate water when disposing of equipment washwater or rinsate. **DO NOT** use the same spray equipment for other purposes unless thoroughly cleaned. **DO NOT** contaminate water used for irrigation or domestic purposes.

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 having a medium potential for reaching both surface water and aquatic sediment via runoff for several months or more after application.

DIRECTIONS FOR USE

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

Read the entire label before using this product.

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.

ENDANGERED AND THREATENED SPECIES PROTECTION REQUIREMENTS:

Before using this product, you must obtain any applicable Endangered Species Protection Bulletins ('Bulletins') within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s). For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.

For Important crop safety information, refer to the Use Directions section under the specific crop.

REPORTING ECOLOGICAL INCIDENTS: For guidance on reporting ecological incidents, see EPA's Pesticide Incident Reporting website: https://www.epa.gov/pesticideincidents.

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), notification to workers, and restricted-entry interval.

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 any waterproof material
- Shoes plus socks

PRODUCT INFORMATION

Covintro Herbicide:

- is a selective herbicide for control of Amaranthus weed species infesting soybean, field corn, seed corn and corn grown for silage.
- is formulated as a suspension concentrate (SC) containing 4.17 pounds diflufenican active ingredient per gallon.
- contains the active ingredient diflufenican which is a PDS inhibitor mode of action that controls weeds by inhibiting enzymes that are essential to the protection of chlorophyll in plant leaves.
- is effective in controlling glyphosate-, triazine-, PPO-, ALS-, HPPD-, and auxin- herbicide resistant populations of Amaranthus weed species.

Requires the addition of tank mix partner(s) for control of weeds other than Amaranthus weed species.

USE RESTRICTIONS

DO NOT apply Aerially.

DO NOT use this product in the states of California, Alaska, or Hawaii.

DO NOT use this product in the state of Florida, except for the counties of: Escambia, Santa Rosa, Okaloos, Walton, Holmes, Washington, Jackson, Calhoun, Gadsden, Leon, Jefferson, Madison, Hamilton, Suwannee, Columbia, Baker, Lafayette, Union, Bradford, Clay, Gilchrist, Dixie, Levy, Alachua, Putnam, and Marion.

Refer to the specific use directions and restrictions in each specific crop section.

APPLICATION INSTRUCTIONS

Covintro Herbicide:

- may be used in either conventional, conservation tillage, or no-till crop management systems.
- may be applied either preplant or preemergence.
- will provide it's most effective weed control when applied and subsequently moved into the soil by rainfall, sprinkler irrigation or mechanical tillage prior to weed emergence.
- may be tankmixed or applied in sequential applications with other herbicides to control additional weeds.
- may be applied using either water carrier or sprayable grade fluid fertilizer as a liquid carrier.
- may be applied by ground application only. Aerial application is not permitted.
- may be applied as either a broadcast spray or as a band application.

Refer to the **SPECIFIC USE DIRECTIONS** section of this label for additional application information specific from each registered use of Covintro Herbicide.

Ground Application (Banding)

Banding herbicide application equipment must be carefully calibrated to prevent crop exposure to concentrations of Covintro Herbicide that exceed the labeled rate for the soil type. It is critical to ensure that the calibrated band width equates to actual band width realized in field applications. Bands actually delivered at a width narrower than targeted will concentrate the product and increase the risk for crop response.

Even flat spray tip nozzles and a band width of no less than 12" must be used.

Apply a broadcast equivalent rate and volume per acre. The following equations may be used to make the required calculations as follows:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{banding rate per acre}$$

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast spray volume per acre} = \text{banding spray volume per acre}$$

Ground Application (Broadcast)

Apply Covintro Herbicide in tank mixtures in a minimum of 10 gallons of spray mixture per acre. Uniform, thorough spray coverage is important to achieve consistent weed control. Confirm that spray tank is equipped with a sparge tube agitator, mechanical agitation devices or jet agitator devices that are capable of providing vigorous agitation while mixing. Agitate thoroughly before and during application with either bypass or mechanical agitation. Maintain adequate in-tank agitation at all times, including during momentary stops to keep the spray mixture in suspension and provide a minimum of 20% bypass at all times. Keep the spray boom at the lowest possible spray height above the target surface. Refer to nozzle manufacturer's specifications for proper nozzle, pressure setting, and sprayer speed for optimum product performance and minimal spray drift. Uneven application or sprayers not properly calibrated may decrease the level of weed control and/or increase the level of adverse crop response. Maintain constant ground speed while applying product to ensure proper distribution. **DO NOT** overlap spray patterns beyond equipment manufacturers specifications as excessive rates may result in adverse crop responses and potential stand loss. The use of screens to protect the pump and nozzles is advised. Screens placed on the suction side of the pump must be 16-mesh or coarser. Equip sprayer with 50 mesh in line filter(s) located between the pump discharge and the spray boom. This filter may be located prior to each spray boom section. If nozzle filters are used, use 50 mesh or coarser nozzle filters as specified by nozzle manufacturer. **DO NOT** place a screen in the recirculation line. Application must be made at a sufficient spray pressure and volume to provide accurate and uniform application of spray particles to a given area without causing spray drift to non-target areas.

RESISTANCE MANAGEMENT

For resistance management, Covintro Herbicide is a Group 12 herbicide. Any weed population may contain or develop plants naturally resistant to Covintro Herbicide and other Group 12 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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

- Rotate the use of Covintro Herbicide or other Group 12 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 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 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 planting clean seed.
- **DO NOT** apply this product alone. An appropriate herbicide tank mix partner must be used to broaden the spectrum of weed control.
- 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 or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer CropScience at 1-866-99BAYER (1-866-992-2937). You can also contact your pesticide distributor or university extension specialist to report resistance.

MANDATORY SPRAY DRIFT MITIGATIONS

MANDATORY SPRAY DRIFT MANAGEMENT

- **DO NOT apply this product aerially.**

Ground Boom Applications

- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes), must register between 3 and 15 miles per hour.
- Wind speed and direction must be measured on location using a windsock or anemometer (including systems to measure wind speed or velocity using application equipment).
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- **DO NOT** release spray at a height greater than 2 feet above the ground or crop canopy.
- Applicators must select nozzle and pressure that deliver coarse or coarser depending on team discussions] droplets in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASAE S572).
- **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. Consider 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. Consider using 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 – Using the lowest spray pressure recommended for the nozzle will produce the target spray volume and droplet size.
  - Spray Nozzle - Consider using a spray nozzle that is designed for the intended application as well as using nozzles designed to reduce drift.
- Release height – Ground Boom
  For ground equipment, the boom should remain level with the crop and have minimal bounce. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- HOODED (OR SHIELDED) SPRAYERS
  Shielding the boom or individual nozzles can reduce spray drift. Consider using hooded sprayers. Applicators should 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, consider using 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.
  Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

MANDATORY RUNOFF/EROSION MITIGATION

Applicators must access and search Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins within six months prior to or on the day of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA) that has a Bulletin in BLT. If you are located inside a PULA, follow the instructions in the bulletin.

If the application site is located outside a PULA, follow the instructions in the section below.

2 mitigation points are required for all field crops listed on this label. Follow the steps below to achieve points.

- Step 1. To achieve the mitigation points specified above, visit EPA's mitigation menu website (www.epa.gov/pesticides/mitigation-menu) for a full list of mitigation and mitigation relief options.
- Step 2. Determine if you are eligible for mitigation relief. Runoff/erosion mitigation is NOT required if certain field/application parameters are present at the time of application (*e.g.*, subsurface or tile drains with controlled outlet, perimeter berm systems, irrigation tailwater return systems, spot treatment, etc).
- Step 3. If the application site does not meet the field/application parameters specified on EPA's mitigation menu website, choose among the mitigation and/or mitigation relief options on EPA's mitigation menu website to meet or exceed the required points noted here before applying this product.
- Step 4. To achieve mitigation points for the application, the mitigation and mitigation relief measures must be:

- Employed in accordance with the instructions and descriptions on EPA's Mitigation Menu Website.
- In place during the application unless a different timing (such as before or after application) is specifically provided in the measure's description on EPA's Mitigation Menu Website. EPA may periodically update the Mitigation Menu Website, for example, by adding new mitigation measures or updating a mitigation measure description.

- Step 5. Additional restrictions may be present in bulletins—always follow the most restrictive bulletin instructions. If you are located in an area where PULAs overlap, follow the most restrictive requirements across all bulletins. When tank mixing, the most restrictive requirements must be followed between the products' labels and bulletins.

COMPATIBILITY TESTING AND TANK MIX PARTNERS

Compatibility

If Covintro Herbicide is to be tank mixed with liquid fertilizers or other pesticides, compatibility must be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, **DO NOT** use this mixture for spraying. Indications of incompatibility usually will appear within 5-15 minutes after mixing. Read and follow all parts of the label of each tank-mix product.

Order of Mixing

Covintro Herbicide may be used with other recommended pesticides, fertilizers, and micronutrients. When using Covintro Herbicide, make sure the sprayer is completely clean, free of rust or corrosion which occurs from winter storage. Examine strainers and screens to be sure the sprayer is clean from previously used pesticides. Ensure that all in-line strainer and nozzle screens in the sprayer are 50 mesh or coarser. **DO NOT** use screens finer than 50 mesh.

Any tank mix containing Covintro Herbicide must be kept agitated and sprayed out immediately. **DO NOT** allow tank mixes to stand for prolonged periods of time.

The proper mixing procedure for Covintro Herbicide, in tank mix combinations with other pesticides is:

1. Fill the spray tank with 50% of the required volume of water and begin agitation. Agitation must continue throughout the entire mixing and spraying procedure.
2. If a compatibility agent is necessary to improve mixing or to prevent formation of undesirable and unsprayable gels or precipitates, while agitating, add it to the carrier already in the tank. Use only compatibility agents cleared by FDA for this use. Read and follow directions for use, cautionary statements, and all other information appearing on the selected compatibility agent label. Check for adequate agitation.
3. Add specified rate of Covintro Herbicide slowly to the spray tank or mixing system and ensure complete dispersion. Maintain and ensure thorough dispersion and sufficient agitation during both mixing and spraying.
4. Add the tank mix product.
5. Fill the spray tank with the balance of water needed.
6. Continue agitation during application and until sprayer tank is empty.

RE-SUSPENDING SC PRODUCTS IN SPRAY SOLUTION

Like other suspension concentrates (SCs), Covintro Herbicide will settle if left standing without agitation. If the spray solution is allowed to settle for one hour or more, reagitate the spray solution for a minimum of 10 minutes before application.

APPLICATION OF COVINTRO HERBICIDE IN FLUID FERTILIZERS

Covintro Herbicide may be applied in fluid fertilizer solutions by following the appropriate mixing procedures and compatibility check. When using tank mix combinations, be sure all components are compatible.

Compatibility checks of Covintro Herbicide and tank mix combinations which include Covintro Herbicide must be made for each batch of fluid fertilizer because of the variability of these fertilizers.

Compatibility Check:

1. Pre-mix 2 teaspoonfuls of Covintro Herbicide with 16 teaspoonfuls of water (1:8 ratio) in a quart jar by adding the water first and follow with Covintro Herbicide. Mix thoroughly. Add the second herbicide after mixing Covintro Herbicide first.
2. Then pour 1 pint of fluid fertilizer into the quart jar and shake well.
3. Allow to stand for 5 minutes.

THIS COMPATIBILITY CHECK MUST ONLY BE USED WHEN MIXING WITH FLUID FERTILIZERS.

Interpretation of Results: If the solution in the jar appears to be uniform, without signs of agglomeration, or without a separation of an oily film on top of the fertilizer, the mixture may be used. If not, repeat the compatibility check using twice the amount of water or add a compatibility agent to the water. If separation occurs, but the mixture can be resuspended by shaking, then application is possible with good agitation in the spray tank.

Tank mixing Guidelines:

1. Add the required amount of water and compatibility agent (if required) to the tank. Start the agitation system while adding Covintro Herbicide followed by a second herbicide and agitate.
2. Add fluid fertilizer and continue agitation.
3. Maintain continuous agitation to assure uniform spray mixture until the tank is emptied.

EQUIPMENT CLEANOUT PROCEDURES

To avoid injury or exposure to non-target crops, thoroughly clean all mixing and spray equipment, including pumps, nozzles, lines and screens with a good quality tank cleaner, on an approved rinse pad or on the field site where an approved crop is to be grown. Mix only as much cleaning solution as needed.

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Use a pressure washer with a high quality commercial spray tank cleaner in water to clean the inside of the spray tank. Take care to wash all parts of the tank, including the inside top surface. If a pressure washer is not available, completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
3. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
4. Dispose of rinsate from steps 1-3 in an appropriate manner.
5. Repeat steps 2-4.
6. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
7. Rinse the complete spraying system with clean water.

Cleanup must be conducted on an approved rinse pad or the field site where an approved crop is to be grown.

ROTATIONAL CROPS

Rotational crops vary in their crop response to low concentrations of Covintro Herbicide remaining in the soil. The amount of Covintro Herbicide that may be present in the soil depends on soil moisture, soil temp, application rate, elapsed time since application, and other environmental factors. When Covintro Herbicide is used in combination with other products, always follow the most restrictive rotational crop requirements. The following rotational crops may be planted after applying Covintro Herbicide: Labeled crops Corn (field and seed) and Soybeans may be replanted at any time; all other crops require a minimum plant back interval of 30 days, except legumes at a minimum of 365 days.

In the event of crop failure: If the crop treated with Covintro Herbicide is lost, only soybeans, field corn, and corn grown for silage may be replanted immediately. **DO NOT** make an additional application of Covintro Herbicide.

Crop	Geography	Rotational Interval (months)	Minimum Precipitation Requirement[1]
Corn (Field and seed) & Soybeans	All	0	None
Wheat, Triticale, Barley, and Rye	All	4	
Sweet corn, Popcorn, Potato, Grain Sorghum, and Sunflower	All	6	
Cotton and Rice	All	10	15 inches of cumulative precipitation from application to planting of rotational crop.[2]
Sugar beets	East of the Mississippi River		
Tobacco, Alfalfa, Canola, Chickpeas, Peas, Peanuts and Lentils	All	12	
Dry Beans	East of the Mississippi River	12	
Dry Beans, Sugar beets	West of the Mississippi River	18	
All other crops[3]	All		

[1] The amount of cumulative precipitation required before planting a rotational crop is in addition to the required rotational interval given in months.

[2] Furrow or flood irrigation not to be included in total. No more than 7 inches of overhead irrigation included in total.

[3] All other crops may be seeded only after the completion of a successful bioassay after a Covintro Herbicide application. Refer to the "Field/Small Scale Bioassay" section.

Cover Crops

Use of cover crops as a means of soil improvement, erosion control, weed and/or insect suppression, etc., following harvest of corn or soybeans in the Fall is increasing. Planting of cover crops in fields treated with Covintro Herbicide is allowed as long as these cover crops are not grazed by livestock nor harvested for food. Cover crops are to be tilled under or chemically controlled with burndown herbicides in the spring. Many cover crops can be planted within 90-120 days after application of Covintro Herbicide.

However, all potential cover crops have not been evaluated for tolerance to Covintro Herbicide and significant injury may occur. Prior to seeding a cover crop, complete a successful field/ home bioassay to provide an indication of the level of tolerance to the prior Covintro Herbicide application. Refer to the "Field/Small Scale Bioassay" section. If used in tank mixtures with other herbicides, always follow the most restrictive label.

Field/Small Scale Bioassay

A field/ small scale bioassay must be completed before rotating to a cover crop other than those specified in the "Rotational Crop Restrictions" section of this label. To conduct an effective **field bioassay**, grow strips of the crop(s) you intend to grow the following season in a field previously treated with Covintro Herbicide. The test strip must be placed in a controlled area and include low areas and knolls, and include variations in soil including type and pH. Crop response to the bioassay will determine if the crop(s) grown in the test strips can be grown safely in the areas previously treated with Covintro Herbicide.

For an effective **small scale bioassay**, collect uniform samples of all soil types from the Covintro Herbicide- treated field (see example above for types of soil in the sample) and place the soil into a sturdy container. Plant the desired cover crop into the soil, apply water and place the container in a warm, sunny area to allow germination and growth of the crop. Monitor growth of the cover crop over a three to four week period. If the cover crop emerges and grows normally, the risk to establish and grow the cover crop in the Covintro Herbicide-treated field must be tolerable.

WEEDS CONTROLLED

Covintro Herbicide applied as directed in this label will control or suppress the weeds listed below. Additional weeds may be controlled with tank mixtures or sequential applications (refer to the TANK MIX INSTRUCTIONS section of this label). Always refer to the tank mix partner labels for specific use rates and additional instructions.

BROADLEAF WEEDS CONTROLLED				
Broadleaf Weeds	Covintro Herbicide Alone		Broadleaf Weeds	Covintro Herbicide Alone
Amaranth, Palmer	C		Waterhemp, common	C
Pigweed, prostrate	C		Waterhemp, tall	C
Pigweed, redroot	C			
Pigweed, smooth	C			
C= Control				

SPECIFIC USE DIRECTIONS

CORN (Field Corn, Seed Corn and Corn Grown for Silage)

Covintro Herbicide may be used in either conventional, conservation tillage, or no-till crop management systems and may be applied either preplant or preemergence. Covintro Herbicide treatments are most effective in controlling weeds when adequate rainfall is received within 14 days after application. If cultivation is necessary because of soil crusting, soil compaction, or weed germination before rain occurs, use shallow tillage including rotary hoe to lightly incorporate Covintro Herbicide. Make certain corn seeds are below the tilled area. If treated soil is moved during tillage practices in such a way that the herbicide barrier is no longer intact, weeds may emerge from areas where treated soil has been removed. **DO NOT** incorporate with a drag harrow after planting. An appropriate herbicide tank mix partner must be used in order to broaden spectrum of weed control.

APPLICATION TIMING

Preplant Surface-Applied

Covintro Herbicide may be applied up to 30 days before planting corn when used in a planned sequential application program including Covintro Herbicide followed by postemergence applied herbicides appropriate for control of the target weeds. An appropriate herbicide tank mix partner must be used to broaden spectrum of weed control. Total Covintro Herbicide applied may not exceed the listed rate for a preplant treatment on the predominate soil type in the field.

Moving treated soil out of the row or moving untreated soil to the surface during planting may result in reduced weed control. For enhanced burndown of emerged broadleaf and grass weeds tank mix with glyphosate, dicamba, paraquat, or 2,4-D according to their labelled use rates. Follow all label directions, rotational crop guidelines, and use restrictions/precautions for Covintro Herbicide and any tank-mix partners and use the most restrictive guidelines.

Preemergence

Apply Covintro Herbicide during planting (behind the planter after furrow closure) or within 3 days after planting. Failure to thoroughly close and firm the seed furrow may allow herbicide to directly contact the seed which can cause injury. An appropriate tank mix partner herbicide must be used to broaden spectrum of control. For enhanced burndown of emerged broadleaf and grass weeds tank mix with glyphosate, dicamba, paraquat, or 2,4-D according to their labelled use rates. If applying Covintro Herbicide to emerged weeds, the inclusion of an appropriate adjuvant (Crop Oil Concentrate (COC), Methylated Seed Oil (MSO), or High Surfactant Oil Concentrate (HSOC)) will enhance burndown activity of controlled weeds. Follow all label directions, rotational crop guidelines, and use restrictions/precautions for Covintro Herbicide and any tank-mix partners and use the most restrictive guidelines.

Application in fall or early spring following harvest of previous crop

Covintro Herbicide may be applied after previous crop harvest and at least 30 days prior to planting corn using the rates in the preplant section. For enhanced burndown of emerged broadleaf and grass weeds tank mix with glyphosate, dicamba, paraquat, or 2,4-D according to their labelled use rates. If applying SC500 Herbicide to emerged weeds, the inclusion of an appropriate adjuvant (Crop Oil Concentrate (COC), Methylated Seed Oil (MSO), or High Surfactant Oil Concentrate (HSOC)) will enhance burndown activity of controlled weeds. Follow all label directions, rotational crop guidelines, and use restrictions/precautions for Covintro Herbicide and any tank-mix partners and use the most restrictive guidelines.

APPLICATION RATES

Application Timing	Maximum Rate in Fluid Ounces of Covintro Herbicide per Acre					
	Coarse Soils		Medium Soils		Fine Soils	
	Sand, Loamy Sand, Sandy loam		Loam, Silt Loam, Silt, Sandy Clay Loam		Silty Clay Loam, Clay Loam, Sandy Clay, Silty Clay, Clay	
	< 1.5% O.M.*	>=1.5% O.M.	< 1.5% O.M.	>=1.5% O.M.	< 1.5% O.M.	>=1.5% O.M.
Preplant 8 to 30 days prior to planting	2.4 (0.0784 lbs ai/A)	3.3 (0.1076 lbs ai/A)			4.1 (0.1334 lbs ai/A)	
Preemerge (0 to 7 days prior to planting or within 3 days of planting)	2.4 (0.0784 lbs ai/A)		3.3 (0.1076 lbs ai/A)		4.1 (0.1334 lbs ai/A)	

*Organic Matter

Application of Covintro Herbicide at less than listed rates for the appropriate soil will only provide suppression of sensitive weeds.

RESTRICTIONS FOR USE

- **DO NOT** apply more than 4.1 fluid ounces per acre (0.1334 lbs) of Covintro Herbicide per 365-day period or exceed the maximum labeled rate for any given soil type.
- **DO NOT** apply more than 4.1 fluid ounces (0.1334 lbs) per acre of Covintro Herbicide in a single application or exceed the maximum labeled rate for any given soil type or crop response may occur.
- **DO NOT** make more than one application per year.
- **DO NOT** apply under conditions that favor runoff
- **DO NOT** apply if soil is saturated with water or above field capacity.

PRECAUTIONS FOR USE

- Spray overlaps produce areas of over application which increase the potential for crop injury.
- **Planting depth:** Seed must be planted a minimum of 1 ½ inches deep and must be completely covered with soil and furrow firmed or reduced crop stand or injury may occur.
- **Application Timing:** Applying Covintro Herbicide less than 8 days before corn planting may increase the risk of crop injury, especially if irrigation or rainfall is received following the application. Injury symptoms include leaf tissue bleaching (whitening), leaf chlorosis (yellowing), necrosis (browning), and/or temporary stunting. Applying Covintro Herbicide more than 8 days (but not more than 30 days) prior to planting may reduce the risk of crop injury.
- **Effect of adverse weather:** Following an application of Covintro Herbicide, periods of cool/cold, wet conditions (cool/cold daytime/nighttime temperatures, saturated soil conditions, recurring rainfall events, etc.) during corn seed germination and/or early crop development period may result in temporary crop injury. Injury symptoms may appear as leaf tissue bleaching (whitening) and/or crop stunting. Corn plants usually recover from this injury without affecting yield.
- **Effect of variable soils on use rate:** The proper use rate of Covintro Herbicide is affected by several soil factors, including soil texture, organic matter, and soil pH. Soils which contain variations in one or more of these factors in a given area are termed variable soils and may be more likely to incur localized corn injury symptoms from an application of Covintro Herbicide. Characteristics of localized soil variants that are more likely to incur injury are a coarser soil texture, a lower organic matter and/or a higher pH (alkaline/calcareous soil) than other areas of the same field and include, among others, clay knolls, eroded hill sides, and terracing with scraped exposed subsoil. The user is responsible for selecting the rate of Covintro Herbicide that is appropriate for all soils in the area of application.

- **Corn hybrids and certain male pollinators:** Corn hybrids and certain male pollinators within blended corn varieties vary in their response to Covintro Herbicide. Not all hybrids or male pollinators within blended corn varieties have been tested for sensitivity to Covintro Herbicide. You should consult with your seed provider, your local Bayer CropScience representative, and/or other knowledgeable agricultural professionals for advice on hybrids or varieties containing male pollinator lines before applying Covintro Herbicide. If the tolerance of a hybrid or variety containing a male pollinator line is not known, you must apply Covintro Herbicide to a small area to first determine if the hybrid is tolerant prior to spraying large acreages of that hybrid.

SPECIAL PRECAUTIONS

Injury to corn may occur when Covintro Herbicide is used under the following conditions:

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- When applied in conjunction with soil-applied organophosphate pesticides.
- Over application or boom overlapping may result in stand loss and soil residues.
- Uneven application can decrease the level of weed control and/or increase the level of injury.
- When applied to any soil with less than ½% organic matter.
- When sprayers are not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- When corn is planted less than 1.5 inches deep, particularly in preemergence application.

Activation: A minimum amount of soil moisture is required to activate Covintro Herbicide. In areas of low rainfall, preemergence applications to dry soil must be followed with light irrigation of 1/4 acre inch of water. **DO NOT** apply heavy irrigation immediately after application. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

Replanting: If replanting is necessary in fields treated with Covintro Herbicide as directed on this label, the field may be replanted to corn or soybeans (depending on the tank mix herbicide utilized). When replanting a minimum of tillage is recommended. **DO NOT** apply a second treatment as injury to corn may occur.

TANK MIX INSTRUCTIONS

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Covintro Herbicide must be used in tank mixture with other herbicides for improved control of certain broadleaf and grass weeds in corn. Preplant/preemergence tank mixtures with Covintro Herbicide may include but are not limited to those listed. Refer to and follow all parts of the label of each tank-mix partner. Tank-mix combinations may be used in either conventional, conservation tillage, or no-till cropping systems and applied at the same timings as Covintro Herbicide unless otherwise specified in the tank mix label. Multiple tank mixtures are allowed unless otherwise specified by the respective product labels. Check all tank-mix product labels for proper rates and compatibilities for multiple tank-mixes.

DO NOT TANK MIX ANY PRODUCT CONTAINING ISOXAFLUTOLE WITH THIS PRODUCT.

Possible Preplant/Preemergence Tank Mix Partners for Additional Weed Control

DiFlexx® (EPA Reg. No. 264-1173; *dicamba*)
Roundup PowerMAX® 3 (EPA Reg. No. 524-659; *glyphosate*)
RT 3® (EPA Reg. No. 524-544; *glyphosate*)
Harness® (EPA Reg. No. 524-473; *acetochlor*)
Degree Xtra® (EPA Reg. No. 524-511; *acetochlor*, *atrazine*)
Harness® Xtra (EPA Reg. No. 524-480; *acetochlor*, *atrazine*)
Harness® Xtra 5.6L (EPA Reg. No. 524-485; *acetochlor*, *atrazine*)
Harness® Max (EPA Reg. No. 524-636; *acetochlor*, *mesotrione*)

2,4-D	dicamba	glufosinate-ammonium	paraquat
flumetsulam	fluthiacet-methyl	glyphosate	clopyralid
dimethenamid-P	acetochlor	s-metolachlor	pyroxasulfone
	flufenacet	thiencarbazone-methyl	atrazine

SOYBEAN

Covintro Herbicide may be used in either conventional, conservation tillage, or no-till crop management systems and may be applied either preplant or preemergence. Covintro Herbicide treatments are most effective in controlling weeds when adequate rainfall is received within 14 days after application. If cultivation is necessary because of soil crusting, soil compaction, or weed germination before rain occurs, use shallow tillage including rotary hoe to lightly incorporate Covintro Herbicide. Make certain soybean seeds are below the tilled area. If treated soil is moved during tillage practices in such a way that the herbicide barrier is no longer intact, weeds may emerge from areas where treated soil has been removed. **DO NOT** incorporate with a drag harrow after planting. An appropriate tank mix partner herbicide must be used in order to broaden spectrum of weed control.

APPLICATION TIMING

Preplant Surface-Applied

Covintro Herbicide may be applied up to 30 days before planting soybean when used in a planned sequential application program including Covintro Herbicide followed by postemergence applied herbicides appropriate for control of the target weeds. An appropriate herbicide tank mix partner must be used in order to broaden spectrum of weed control. Total Covintro Herbicide applied may not exceed the listed rate for a preplant treatment on the predominant soil type in the field. Moving treated soil out of the row or moving untreated soil to the surface during planting may result in reduced weed control. For enhanced burndown of emerged broadleaf and grass weeds tank mix with glyphosate, dicamba, paraquat, or 2,4-D according to their labelled use rates. Follow all label directions, rotational crop guidelines, and use restrictions/precautions for Covintro Herbicide and any tank-mix partners and use the most restrictive guidelines.

Preemergence

Apply Covintro Herbicide during planting (behind the planter after furrow closure) or within 3 days after planting. Failure to thoroughly close and firm the seed furrow may allow herbicide to directly contact the seed which can cause injury. An appropriate tank mix herbicide partner must be used in order to broaden spectrum of weed control. For enhanced burndown of emerged broadleaf and grass weeds tank mix with glyphosate, dicamba, paraquat, or 2,4-D according to their labelled use rates. If applying Covintro Herbicide to emerged weeds, the inclusion of an appropriate adjuvant (Crop Oil Concentrate (COC), Methylated Seed Oil (MSO), or High Surfactant Oil Concentrate (HSOC)) will enhance burndown activity of controlled weeds. Follow all label directions, rotational crop guidelines, and use restrictions/precautions for Covintro Herbicide and any tank-mix partners and use the most restrictive guidelines.

Application in fall or early spring following harvest of previous crop

Covintro Herbicide may be applied after previous crop harvest and at least 30 days prior to planting soybean using the rates in the preplant section. For enhanced burndown of emerged broadleaf and grass weeds tank mix with glyphosate, dicamba, paraquat, or 2,4-D according to their labelled use rates. If applying SC500 Herbicide to emerged weeds, the inclusion of an appropriate adjuvant (Crop Oil Concentrate (COC), Methylated Seed Oil (MSO), or High Surfactant Oil Concentrate (HSOC)) will enhance burndown activity of controlled weeds. Follow all label directions, rotational crop guidelines, and use restrictions/precautions for Covintro Herbicide and any tank-mix partners and use the most restrictive guidelines.

<table>
<tr><th rowspan="3">Application Timing</th><th colspan="6">Maximum Rate in Fluid Ounces of Covintro Herbicide per Acre</th></tr>
<tr><th colspan="2">Coarse Soils

Sand, Loamy Sand, Sandy Loam</th><th colspan="2">Medium Soils

Loam, Silt Loam, Silt, Sandy Clay Loam</th><th colspan="2">Fine Soils

Silty Clay Loam, Clay Loam, Sandy Clay, Silty Clay, Clay</th></tr>
<tr><th>< 1.5% O.M.*</th><th>>=1.5% O.M.</th><th>< 1.5% O.M.</th><th>>=1.5% O.M.</th><th>< 1.5% O.M.</th><th>>=1.5% O.M.</th></tr>
<tr><td>Preplant 8 to 30 days prior to planting</td><td>2.4 (0.0784 lbs ai/A)</td><td colspan="2">3.3 (0.1076 lbs ai/A)</td><td colspan="2">4.1 (0.1334 lbs ai/A)</td><td>4.9 (0.1597 lbs ai/A)</td></tr>
<tr><td>Preemerge (0 to 7 days prior to planting or within 3 days of planting)</td><td colspan="2">2.4 (0.0784 lbs ai/A)</td><td>3.3 (0.1076 lbs ai/A)</td><td colspan="2">4.1 (0.1334 lbs ai/A)</td><td>4.1 - 4.9 (0.1334 lbs - 0.1597 lbs ai/A)</td></tr>
</table>

*Organic Matter

Application of Covintro Herbicide at less than listed rates for the appropriate soil will only provide suppression of sensitive weeds.

RESTRICTIONS FOR USE

- **DO NOT** apply more than 4.9 fluid ounces per acre (0.1597 lbs) of Covintro Herbicide per 365-day period or exceed the maximum labeled rate for any given soil type.
- **DO NOT** apply more than 4.9 fluid ounces (0.1597 lbs) per acre of Covintro Herbicide in a single application or exceed the maximum labeled rate for any given soil type or crop response may occur.
- **DO NOT** make more than one application per year.
- **DO NOT** apply under conditions that favor runoff
- **DO NOT** apply if soil is saturated with water or above field capacity.

PRECAUTIONS FOR USE

- Spray overlaps produce areas of over application which increase the potential for crop injury.
- **Planting depth:** Soybean seed must be planted a minimum of 1 ½ inches deep and must be completely covered with soil and furrow firmed or reduced crop stand or injury may occur.
- **Application Timing:** Applying Covintro Herbicide less than 8 days before soybean planting may increase the risk of crop injury, especially if irrigation or rainfall is received following the application. Injury symptoms may appear as leaf tissue bleaching (whitening), leaf chlorosis (yellowing), necrosis (browning), and/or temporary crop stunting. Applying Covintro Herbicide more than 8 days (but not more than 30 days) prior to planting may reduce the risk of crop injury.
- **Effect of variable soils on use rate:** The proper use rate of Covintro Herbicide is affected by several soil factors, including soil texture, organic matter, and soil pH. Soils which contain variations in one or more of these factors in a given area are termed variable soils and may be more likely to incur localized soybean injury symptoms from an application of Covintro Herbicide. Characteristics of localized soil variants that are more likely to incur injury are a more coarse soil texture, a lower organic matter and/or a higher pH (alkaline/calcareous soil) than other areas of the same field and include, among others, clay knolls, eroded hill sides, and terracing with scraped exposed subsoil. The user is responsible for selecting the rate of Covintro Herbicide that is appropriate for all soils in the area of application.
- **Effect of adverse weather:** Following an application of Covintro Herbicide, extended periods of cool/cold, wet conditions (cool/cold daytime/nighttime temperatures, saturated soil conditions, recurring rainfall events, etc.) during soybean seed germination and/or early crop development period may result in temporary crop injury. Injury symptoms may appear as leaf tissue bleaching (whitening) and/or crop stunting. Soybean plants usually recover from this injury without affecting yield.

SPECIAL PRECAUTIONS

Injury to soybeans may occur when Covintro Herbicide is used under the following conditions:

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- When applied in conjunction with soil-applied organophosphate pesticides.
- Over application or boom overlapping may result in stand loss and soil residues.
- Uneven application can decrease the level of weed control and/or increase the level of injury.
- When applied to any soil with less than ½% organic matter.
- When sprayers are not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- When soybeans are planted less than 1 ½ inches deep, particularly in preemergence application.

Activation: A minimum amount of soil moisture is required to activate Covintro Herbicide. In areas of low rainfall, preemergence applications to dry soil must be followed with light irrigation of 1/4 acre inch of water. **DO NOT** apply heavy irrigation immediately after application. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

Rate Ranges: Where a rate range is shown, use a lower rate on soils that are coarse-textured or low in organic matter. Use a higher rate on soils that are relatively fine-textured or high in organic matter.

Replanting: If replanting is necessary in fields treated with Covintro Herbicide as directed on this label, the field may be replanted to corn (if 4.1 fluid ounces per acre or less was applied) or soybeans. Minimize tillage when replanting. **DO NOT** apply a second treatment as injury to soybeans may occur.

TANK MIX INSTRUCTIONS

TANK MIX INSTRUCTIONS

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable

restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive

directions for use and precautionary statements of each product in the tank mixture. Covintro Herbicide may be used in tank mixture with other herbicides for improved control of certain broadleaf and grass weeds in soybeans. Preplant/preemergence tank mixtures with Covintro Herbicide include but are not limited to those listed. Refer to and follow all parts of the label of each tank-mix partner. Tank-mix combinations may be used in either conventional, conservation tillage, or no-till cropping systems and applied at the same timings as Covintro Herbicide unless otherwise specified in the tank mix label. Multiple tank mixtures are allowed unless otherwise specified by the respective product labels. Check all tank-mix product labels for proper rates and compatibilities for multiple tank-mixes.

DO NOT TANK MIX ANY PRODUCT CONTAINING ISOXAFLUTOLE WITH THIS PRODUCT.

Possible Preplant/Preemergence Tank Mix Partners for Additional Weed Control

Roundup PowerMAX® 3 (EPA Reg. No. 524-659; *glyphosate*)			
RT 3® (EPA Reg. No. 524-544; *glyphosate*)			
Stryax® (EPA Reg. No. 264-1214; *dicamba*)			
Warrant® (EPA Reg. No. 524-591; *acetochlor*)			
acetochlor	dicamba	glufosinate-ammonium	paraquat
glyphosate	pyroxasulfone	s-metolachlor	dimethenamid-P
pendimethalin	trifluralin	flufenacet	sulfentrazone
saflufenacil	flumioxazin	2,4-D	chlorimuron-ethyl
cloransulam-methyl	metribuzin		

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER HANDLING AND DISPOSAL:

CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINERS AND OTHER CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY

Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

Triple rinse or pressure rinse (or equivalent) this container 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 1/4 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or Bayer at 1-800-768-6387. If recycling is not available, dispose of in accordance with federal, state, and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

IMPORTANT NOTICE – PLEASE READ: LIMITATIONS OF WARRANTIES, LIABILITY, AND REMEDIES

This Notice of Limitation of Warranties, Liability, and Remedies ("Notice") and instructions to the purchaser and/or user ("Purchaser") contained in this product ("Product") label, including without limitation under Directions for Use (collectively, "Directions for Use"), are included in the terms of sale of this Product. Please read the Directions for Use and this Notice entirely before using this Product. The Purchaser accepts, acknowledges, and agrees to be bound by the Directions for Use and the terms of this Notice upon use of the Product. If Purchaser does not accept such terms, Purchaser must return the unopened Product container immediately. Any use and/or transfer of this Product must be authorized by Bayer CropScience LLC and accompanied by this Notice.

INHERENT RISKS OF USE: The Directions for Use of this Product are believed to be adequate, and Purchaser must carefully follow the Directions for Use. However, it is impossible to eliminate all risks associated with the use of this Product. Crop injury, ineffectiveness, or other unintended consequences may result because of factors and conditions beyond the control of Bayer CropScience LLC and its authorized Product distributors ("Seller"), including, among other things, adverse weather conditions, presence of other materials, and the manner of use or application. To the extent consistent with applicable law, Purchaser assumes all such risks.

To the extent the Product is a seed treatment product, Purchaser acknowledges that treatment of damaged seed (including, without limitation, highly mechanically damaged seed) or seed of low vigor or poor quality may result in reduced germination or seed and seedling vigor. Prior to use of this Product, Purchaser should inspect seed for damage and treat and conduct germination tests on a small portion of seed before treating a full seed lot with any seed treatment product.

EXPRESS WARRANTY: Seller's sole and exclusive warranty ("Exclusive Warranty") on the Product is the statements made on this Product label.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, EXCEPT FOR THE EXCLUSIVE WARRANTY SET FORTH ABOVE, SELLER DISCLAIMS ANY AND ALL WARRANTIES WITH RESPECT TO THIS PRODUCT, WHETHER EXPRESS OR IMPLIED (EITHER IN FACT OR BY OPERATION OF LAW), INCLUDING BUT NOT LIMITED TO: (A) THE IMPLIED WARRANTY OF MERCHANTABILITY; (B) THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; (C) THE IMPLIED WARRANTY AGAINST NONINFRINGEMENT (FOR THIS PRODUCT ALONE OR IN COMBINATION WITH ANY OTHER PRODUCTS); AND (D) ANY WARRANTIES OF CROP PERFORMANCE OR, IF APPLICABLE, CARRYOVER SEED PERFORMANCE.

LIMITATION OF LIABILITY AND REMEDIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW:

1. SELLER'S TOTAL LIABILITY AND PURCHASER'S EXCLUSIVE REMEDY FOR ANY AND ALL LOSSES, INJURIES AND/OR DAMAGES ARISING FROM THE PURCHASE, USE, OR HANDLING OF THIS PRODUCT, OR OTHERWISE ARISING OUT OF A BREACH BY SELLER OF THE EXCLUSIVE WARRANTY, HOWEVER SUCH LIABILITY MAY ARISE, WHETHER SUCH CLAIMS ARE BASED ON CONTRACT, NEGLIGENCE, STRICT LIABILITY, TORT, OR ANY OTHER THEORY OF RECOVERY OR REMEDY, SHALL BE, AT THE ELECTION OF SELLER OR SELLER'S DELEGATE, AN AMOUNT NOT TO EXCEED THE PURCHASE PRICE PAID BY PURCHASER FOR THIS PRODUCT (AS SET FORTH IN THE APPLICABLE INVOICE) OR THE REPLACEMENT OF THE PRODUCT.

2. SELLER SHALL NOT BE LIABLE TO PURCHASER AND/OR ANY THIRD PARTY FOR ANY INCIDENTAL, CONSEQUENTIAL, RELIANCE, REMOTE, EXEMPLARY, PUNITIVE, SPECIAL, OR INDIRECT DAMAGES INCURRED OR EXPENDED IN THE PURCHASE, USE OR HANDLING OF THIS PRODUCT.

3. PURCHASER AGREES THAT IF THE PURCHASE PRICE PAID BY PURCHASER FOR THIS PRODUCT OR REPLACEMENT PRODUCT IS PROVIDED, THE REMEDY SET FORTH IN THIS NOTICE WILL NOT HAVE FAILED OF ITS ESSENTIAL PURPOSE.

PROMPT NOTICE OF CLAIMS REQUIRED: To the extent consistent with applicable law, as a condition to receiving Purchaser's limited remedy set forth above, any and all claims brought against the Seller must be brought within 30 days after the condition or event giving rise to the claim is discovered or should have been discovered, or prior to the harvest of any crop to which the Product was applied, whichever comes first, so that the claim can be investigated, and the Product or crop inspected.

MISCELLANEOUS: Purchaser agrees that this Notice is the entire agreement between Seller and Purchaser regarding Seller's warranty and liability for this Product. No modification of, addition to, or waiver of any of the terms of this Notice shall be binding unless set forth in writing and signed by an authorized representative of Bayer CropScience LLC. If any portion of this Notice not material to the remaining portions shall be held illegal, void, or ineffective by a governmental authority, the remaining portions shall remain in full force and effect. If any portion of this Notice is in conflict with any applicable statute or rule of law, then such portion shall be deemed to be modified to conform to such statute or rule of law.

Bayer (reg'd), Bayer Cross (reg'd), Covintro™ Herbicide, Roundup PowerMAX® 3, Warrant®, DiFlexx®, Stryax®, Harness®, Balance Flexx®, Corvus®, TriVolt®, Degree Xtra®, Harness® Xtra, Harness® Xtra 5.6L, Harness® Max, and Xtendimax® are trademarks of Bayer Group. ©2026 Bayer Group. All rights reserved.

Bayer

Covintro™ Herbicide

DIFLUFENICAN | GROUP 12 | HERBICIDE

For preemergence control of certain broadleaf weeds on field corn and soybeans

ACTIVE INGREDIENT:	
Diflufenican [N-(2,4-difluorophenyl)-2-[3-(trifluoromethyl)phenoxy]pyridine-3-carboxamide]	42.01%
OTHER INGREDIENTS:	57.99%
TOTAL:	100.00%

Contains 4.17 pounds per U.S. gallon (500 grams per liter) of the active ingredient per U.S. gallon

EPA Reg. No. 264-1213

KEEP OUT OF REACH OF CHILDREN

CAUTION PRECAUCIÓN

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.

Please refer to booklet for additional precautionary statements and directions for use.

For **MEDICAL** and **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours a Day 1-800-334-7577
For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

MIX WELL BEFORE USE

NET CONTENTS: 2 1/2 GALLONS

1 97515 27521 1

FIRST AID

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 by mouth to an unconscious person.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
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.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.

In case of emergency, call the toll-free Bayer CropScience Emergency Response telephone number: 1-800-334-7577.

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

Note to Physician: No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Harmful if swallowed or absorbed through the skin.
- Causes moderate eye irritation.
- Avoid contact with skin, eyes or clothing.
- 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.

DIRECTIONS FOR USE

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

Read the entire label before using this product.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER HANDLING AND DISPOSAL:

CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINERS AND OTHER CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY

Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

Triple rinse or pressure rinse (or equivalent) this container 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 1/4 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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Produced for
Bayer CropScience LLC
800 N. Lindbergh Blvd.
St. Louis, MO 63167

Bayer

US91244017A 260630A 07/26

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name	CONVINTRO™
Product code (UVP)	87322688
SDS Number	102000057596

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use	Herbicide
Restrictions on use	See product label for restrictions.

Information on supplier

Supplier	Bayer CropScience LLC 800 North Lindbergh Blvd. St. Louis, MO 63167 USA
Responsible Department	Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days)	1-800-334-7577
Product Information Telephone Number	1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Hazards Not Otherwise Classified (HNOC)
No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Diflufenican	83164-33-4	42.01

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High volume water jet
Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters	In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Specific hazards from the substance or mixture which can increase the fire

Flash point	>100 °C / 212 °F
Auto-ignition temperature	> 650 °C / > 1202 °F
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Additional advice	Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.
Reference to other sections	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.
Hygiene measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean

thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight.
Advice on common storage	Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Diflufenican	83164-33-4	5.5 mg/m3 (TWA)		OES BCS*

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Exposure controls

Personal protective equipment
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.
Hand protection	Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
Eye protection	Tightly fitting safety goggles
Skin and body protection	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form	suspension
Colour	beige
Odour	almost odourless

Odour Threshold	No data available
pH	6.5 - 8.5 (10 %) (23 °C) (deionized water)
Melting point/ range	No data available
Boiling Point	No data available
Flash point	> 100 °C / 212 °F
Flammability	Not applicable
Auto-ignition temperature	> 650 °C / > 1202 °F
Thermal decomposition	No data available
Minimum ignition energy	No data available
Self-accelarating decomposition temperature (SADT)	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	ca. 1.19 g/cm³ (20 °C)
Water solubility	miscible
Partition coefficient: n-octanol/water	Diflufenican: log Pow: 4.2
Viscosity, dynamic	200 - 300 mPa.s (20 °C) Velocity gradient 20 /s 70 - 120 mPa.s (20 °C) Velocity gradient 100 /s
Viscosity, kinematic	232 mm²/s
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113
Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	No incompatible materials known.
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Skin contact, Eye contact, Inhalation

Immediate Effects

Eye	May cause temporary eye irritation.
Skin	May be harmful in contact with skin.
Ingestion	May be harmful if swallowed.
Inhalation	Not expected to produce significant adverse effects when recommended use instructions are followed.

Information on toxicological effects

Acute oral toxicity	LD50 (Rat) > 5,000 mg/kg Test conducted with a similar formulation.
Acute inhalation toxicity	LC50 (male/female combined Rat) > 5.05 mg/l Exposure time: 4 h Nose exposure only. No deaths Test conducted with a similar formulation.
Acute dermal toxicity	LD50 (Rat) > 4,000 mg/kg Test conducted with a similar formulation.
Skin corrosion/irritation	No skin irritation (Rabbit) Test conducted with a similar formulation.
Serious eye damage/eye irritation	No eye irritation (Rabbit) Test conducted with a similar formulation.
Respiratory or skin sensitisation	Skin: Non-sensitizing. (Mouse) OECD Test Guideline 429, local lymph node assay (LLNA) Test conducted with a similar formulation.

Assessment STOT Specific target organ toxicity – single exposure

Diflufenican: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Diflufenican did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Diflufenican was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Diflufenican was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

Assessment toxicity to reproduction

Diflufenican did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Diflufenican did not cause developmental toxicity in rats and rabbits.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

Information given is based on data obtained from similar substances.
The non-acute information pertains to the active ingredient(s).
No further toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) > 7.52 mg/l semi-static test; Exposure time: 96 h Test conducted with a similar formulation.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) > 4.46 mg/l semi-static test; Exposure time: 48 h Test conducted with a similar formulation.
Toxicity to aquatic plants	ErC50 (Raphidocelis subcapitata (freshwater green alga)) 1.41 µg/l static test; Exposure time: 72 h Test conducted with a similar formulation.
	NOEC (Raphidocelis subcapitata (freshwater green alga)) 0.293 µg/l

	Exposure time: 72 h Test conducted with a similar formulation.
	ErC50 (Ankistrodesmus falcatus) 0.000071 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient diflufenican.
	EC10 (Ankistrodesmus falcatus) 0.000029 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient diflufenican.
Biodegradability	Diflufenican: Not rapidly biodegradable
Koc	Diflufenican: Koc: 3417
Bioaccumulation	Diflufenican: Bioconcentration factor (BCF) 1,596 Does not bioaccumulate.
Mobility in soil	Diflufenican: criterion of mobility not fulfilled

Results of PBT and vPvB assessment

PBT and vPvB assessment	Diflufenican: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Additional ecological information	No other effects to be mentioned.
Environmental precautions	Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number	**3082**
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFLUFENICAN)

IATA

UN number	**3082**
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFLUFENICAN)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations
TSCA list

Water	7732-18-5
1,2-Propanediol	57-55-6

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
No export notification needs to be made.
SARA Title III - Section 302 - Notification and Information
Not applicable.
SARA Title III - Section 313 - Toxic Chemical Release Reporting
None.

US States Regulatory Reporting
CA Prop65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US State Right-To-Know Ingredients

1,2-Propanediol	57-55-6	MN, RI

Environmental
CERCLA
None.
Clean Water Section 307(a)(1)
None.

Safe Drinking Water Act Maximum Contaminant Levels
None.

EPA/FIFRA Information:
This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word:	Caution!
Hazard statements:	Harmful if swallowed or absorbed through skin. Causes moderate eye irritation.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

ATE	Acute toxicity estimate
TWA	Time weighted average
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
ACGIH	US. ACGIH Threshold Limit Values
WHO	World health organisation
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
CAS-Nr.	Chemical Abstracts Service number
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
TDG	Transportation of Dangerous Goods
N.O.S.	Not otherwise specified
49CFR	Code of Federal Regulations, Title 49
OECD	Organization for Economic Co-operation and Development
UN	United Nations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
IARC	International Agency for Research on Cancer

NFPA 704 (National Fire Protection Association):
Health - 2 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Fourth Edition Ratings Guide)
Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard,
* = chronic health hazard

SAFETY DATA SHEET

Reason for Revision: The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 11: Toxicological Information. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

Revision Date: 06/26/2025

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.

BAYER

Xivana® Prime

NET CONTENTS:

1 Gallon

FLUOXAPIPROLIN	GROUP 49	FUNGICIDE

For: Fungicide for control or suppression of certain crop diseases

ACTIVE INGREDIENT:

FLUOXAPIPROLIN*	1.90%
OTHER INGREDIENTS:	98.10%
TOTAL:	100.00%

Contains 0.17 pounds active ingredient per U.S. gallon (20 grams AI/liter)

*CAS No. 1360819-11-9

EPA Reg. No. 264-1226

KEEP OUT OF REACH OF CHILDREN

CAUTION PRECAUCIÓN

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 Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

For **MEDICAL** and **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours a Day 1-800-334-7577

For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

Produced for: Bayer CropScience LLC
800 N. Lindbergh Blvd.
St. Louis, MO 63167

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EPA Est. No. 264-MO-3

US89804701A 260630A 07/26

FIRST AID

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • **DO NOT** give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

- **In case of emergency, call the toll-free Bayer CropScience Emergency Response telephone number: 1-800-334-7577.**
- **For medical emergencies, call the poison control center at 1-800-222-1222.**
- **Have a product container or label with you when calling a poison control center or doctor, or going for treatment.**
- **For general information about this product, call 1-866-99BAYER, or contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday during hours of operation, or at http://npic.orst.edu**

Note to Physician: Treat symptomatically.

PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

- Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
- Harmful if swallowed.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- shoes plus socks
- chemical-resistant gloves made of any waterproof material

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 wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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.

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)(e)(f), the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, aquatic invertebrates, oysters and shrimp.

Ground Water 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 ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks after

application. This product breaks down into a degradate that is classified as having a high potential for reaching surface water via runoff for several weeks 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 fluoxapiprolin 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.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, 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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: 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 OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

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, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, 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 over long-sleeved shirt and long pants
- Chemical-resistant gloves (made of any waterproof material)
- Shoes plus socks

PRODUCT INFORMATION

- XIVANA® PRIME fungicide is a foliar fungicide for vegetable and vine crops that is highly active on downy mildew, late blight, and other oomycete diseases.
- For best results, begin applications as soon as crop and/or environmental conditions become favorable for disease development.
- Consult your agricultural advisor, university specialist, or Cooperative Extension Service for disease management recommendations specific to your area.

LABELED USES

Brassica head and stem vegetables (Group 5-16); Bulb vegetables (Group 3-07); Cucurbit vegetables (Group 9); Fruiting vegetables (Group 8-10); Leafy vegetables (Group 4-16); Leaf petiole vegetables (Subgroup 22B); Small fruit vine climbing, except fuzzy kiwifruit (Subgroup 13-07F); Tuberous and corm vegetables (Subgroup 1C).

USE RESTRICTIONS

Refer to the specific use directions and restrictions in each Crop, Crop Group or Crop Subgroup table.

RESISTANCE MANAGEMENT

For resistance management, please note that XIVANA PRIME contains a Group 49 / OSBPI fungicide. Any fungal population may contain individuals naturally resistant to XIVANA PRIME and other Group 49 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of XIVANA PRIME or other Group 49 fungicides within a growing season sequence with different groups that control the same pathogens.
- **DO NOT** apply Group 49 fungicides for more than 33% of the total fungicide applications per season.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Bayer CropScience at 1-866-99BAYER (1-866-992-2937). You can also contact your pesticide distributor or university extension specialist to report resistance.

MANDATORY SPRAY DRIFT

Aerial Applications (Rotor or Fixed Wing)

- **DO NOT** release spray at a height greater than 10 ft 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.

APPLICATION INSTRUCTIONS

Ground Application

For optimum disease control, apply in sufficient water to ensure thorough coverage of foliage, bloom, and fruit. See individual crop directions for minimum spray volume recommendations and dilution requirements.

Boom-less Ground Application

Air-assisted or air-blast sprayers move spray droplets into the crop canopy using a forced-air system. The fan must be set up to deliver only enough air volume to penetrate the canopy and provide good coverage. Adjust deflectors or other aiming devices to direct spray only to the target area. Equip sprayers with nozzles that provide accurate and uniform application.

Aerial Application

For optimum disease control, apply in sufficient water to ensure thorough coverage of foliage, bloom, and fruit. See individual crop directions for minimum spray volume recommendations and dilution requirements.

Ground Application (Banding)

XIVANA PRIME may be banded but rate and spray volume must be adjusted to treated acre area.

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{banding rate per acre}$$

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast spray volume per acre} = \text{banding spray volume per acre}$$

Spray Additives

Spray adjuvants are recommended for use with XIVANA PRIME and improve coverage and efficacy.

CHEMIGATION

Types of irrigation systems

Apply this product only through the following irrigations systems:

- Center pivot
- Motorized-lateral move
- Traveling gun
- Solid set
- Portable (wheel move, side roll, end tow, or hand move)

Uniform Water Distribution and System Calibration

The chemigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The chemigation system must be calibrated to uniformly apply the rates specified in crop-specific label sections. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

Chemigation Monitoring

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Required System Safety Devices

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

DO NOT apply when wind speed favors drift beyond the area intended for treatment.

Using Water from Public Water Systems

DO NOT connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer **(RPZ)** or the functional equivalent in the water supply line upstream from the point of pesticide

introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There must be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

Injection for Chemigation

Inject the specified dosage of XIVANA PRIME into the irrigation main water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in the main stream flow such that thorough mixing with the irrigation water is ensured.

Center-Pivot and Automatic-Move Linear Systems

For injections of pesticides, these continuously moving systems must use a positive displacement injection pump of either diaphragm or piston type and be constructed of materials that are compatible with pesticides. They must also be capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems. Thoroughly mix required amount of this product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until this product has been cleared from the last sprinkler head.

Inject the specified dosage per acre continuously for one complete revolution (center pivot) or move of the system. Run system at maximum speed. It is advised that nozzles in the immediate area of control panels, chemical supply tanks, pumps, and system safety devices be plugged to prevent chemical contamination of these areas. The use of END GUNS is NOT ADVISED. End guns that provide uneven distribution of treated water can result in lack of effectiveness or illegal pesticide residues in or on the crop.

Solid Set and Manually Controlled Linear Systems

With stationary systems, an effectively designed in-line Venturi applicator unit is preferred to support even and quick distribution. However, a positive-displacement pump can also be used. For solid set systems, determine acreage covered by sprinkler. Fill the tank of injection equipment with water and adjust flow to use contents over 30 to 45 minutes. Mix desired amount of this product for acreage to be covered with water so that the total mixture of this product plus water in the injection tank is equal to the quantity of water used during calibration. Provide chemical supply tank agitation sufficient for mixing until chemigation is completed. Operate entire system at normal pressures as advised by the manufacturer of injection equipment used, for amount of time established during calibration. XIVANA PRIME can be injected during the irrigation cycle or as a separate application. Stop injection equipment with any system after treatment is completed and continue to operate irrigation system until this product has been cleared from the last sprinkler head.

Flushing and Cleaning the Chemical Injection System

At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

In order to apply pesticides accurately, the chemical injection system must be kept clean and free of chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

SPRAY MIXING AND COMPATIBILITY

Begin with clean spray equipment and add one-half of the required amount of water to the spray or mixing tank and start agitation. Add the required quantity of fungicide and the tank-mix partner if applicable to the water and complete filling with water to the required total volume. Follow the advice of your State Cooperative Extension Service for tank mixing with other products. In general, follow the order beginning first with water conditioners, water soluble packaging (wait for it to completely dissolve), wettable powders and water dispersible granular products, liquid flowables and suspension concentrates, emulsifiable concentrates, and adjuvants last. Maintain agitation throughout spraying. **DO NOT** allow spray mixture to remain in the tank overnight, or for long periods during the day without agitation.

XIVANA PRIME is physically compatible with most commonly used fungicide, herbicide, insecticide, and foliar nutrient products. However, the compatibility of XIVANA PRIME with all potential tank-mix partners has not been fully investigated. Compatibility with other pesticides can be tested by conducting a jar test with the volumes and rates typically used in agricultural application. Using a small container of water, add the proportionate amounts of the products: wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 15 minutes. Look for signs of separation, globules, sludge, flakes, or other precipitates. Physical compatibility is indicated if the combination remains mixed or can be remixed readily.

The crop safety of all potential tank-mixes with XIVANA PRIME has not been tested on all crops listed on the label. Before applying any tank-mixture not specified on this label, safety to the target crop must be confirmed on a small portion of the crop listed on the label to be treated to ensure an adverse response will not occur.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

ROTATIONAL CROP RESTRICTIONS

Follow the rotational crop restrictions on the label of any tank mix partners, in addition to the restrictions below for XIVANA PRIME.

IMMEDIATE PLANT-BACK:

Treated areas may be replanted with any crop specified on this label, including the following:

Brassica head and stem vegetables (Group 5-16), Bulb vegetables (Group 3-07), Cucurbit vegetables (Group 9), Fruiting vegetables (Group 8-10), Leafy vegetables (Group 4-16), Leaf petiole vegetables (Subgroup 22B), Small fruit vine climbing - except fuzzy kiwifruit (Subgroup 13-07F), and Tuberous and corm vegetables (Subgroup 1C)

30-DAY PLANT-BACK:

The following crops can be planted 30 days after the last application of XIVANA PRIME:

Strawberry and other berries in the Low growing berry subgroup (Subgroup 13-07G)

Cereal grains (Group 15)

12-MONTH PLANT-BACK:

All other crops not listed above, except Root vegetables (Subgroup 1A).

DO NOT ROTATE to Root vegetables (Subgroup 1A).

SPECIFIC CROP DIRECTIONS

CROP USE DIRECTIONS

BRASSICA HEAD and STEM VEGETABLES (Group 5-16)

Crops of Crop Group 5-16 including:

Broccoli; Brussels sprouts; Cabbage; Cabbage Chinese, napa; Cauliflower

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate	Application Instructions
Downy mildew (*Peronospora parasitica*) White rust[1] (*Albugo candida*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A of XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 3 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 41.1 fluid ounces/Acre (0.054 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).

[1]Not registered for use on White rust (*Albugo candida*) in crop group 5-16 by California.

BULB VEGETABLES (Group 3-07)
Crops of Crop Group 3-07 including:

Onion, bulb subgroup: Bulb Daylily; Bulb Fritillaria; Bulb Garlic; Bulb Great-Headed Garlic; Bulb Serpent Garlic; Bulb Lily; Bulb Onion; Bulb Chinese Onion; Pearl Onion; Bulb Potato Onion; Bulb Shallot.

Onion, green subgroup: Fresh Leaves Chive; Fresh Leaves Chinese Chive; Elegans Hosta; Leaves Fritillaria; Kurrat; Lady's Leek; Leek; Wild Leek; Beltsville Bunching Onion; Fresh Onion; Green Onion; Macrostem Onion; Tree Onion Tops; Welsh Onion Tops; Fresh Leaves Shallot.

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate	Application Instructions
Downy mildew (*Peronospora destructor*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 3 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 41.1 fluid ounces/Acre (0.054 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).

CUCURBIT VEGETABLES (Group 9)
Crops of Crop Group 9 including:

Melon subgroup: Citron Melon; Muskmelon (hybrids and/or cultivars of *Cucumis melo* including True Cantaloupe, Cantaloupe, Casaba, Crenshaw Melon, Golden Pershaw Melon, Honeydew Melon, Honey Balls, Mango Melon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon); Watermelon.

Squash/Cucumber subgroup: Chayote (Fruit); Chinese Waxgourd; Cucumber; Gherkin; Gourd, Edible; *Momordica* spp.; Pumpkin; Squash, Summer; Squash, Winter.

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate	Application Instructions
Downy mildew (*Pseudoperonospora cubensis*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).
Disease Suppressed	**Application Rate**	**Application Instructions**
Phytophthora blight (*Phytophthora capsici*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease.

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 3 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 41.1 fluid ounces/Acre (0.054 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).

FRUITING VEGETABLES (Group 8-10)
Crops of Crop Group 8-10 including:

Tomato subgroup: Bush Tomato; Cocona; Currant Tomato; Garden Huckleberry; Goji Berry; Groundcherry; Naranjilla; Sunberry; Tomatillo; Tomato; Tree Tomato.

Pepper/Eggplant subgroup: African Eggplant; Bell Pepper; Eggplant; Martynia; Nonbell Pepper; Okra; Pea Eggplant; Pepino; Roselle; Scarlet Eggplant.

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate	Application Instructions
Buckeye Rot[1] (*Phytophthora parasitica*) Late blight (*Phytophthora infestans*) Pepper Downy mildew[1] (*Peronospora tabacina*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).

Disease Suppressed	Application Rate	Application Instructions
Phytophthora blight (*Phytophthora capsici*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease.

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 3 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 41.1 fluid ounces/Acre (0.054 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).

[1]Not registered for use on Buckeye rot (*Phytophthora parasitica*) or Pepper downy mildew (*Peronospora tabacina*) in crop group 8-10 by California.

LEAFY VEGETABLES (Group 4-16)

Crops of Crop Group 4-16 including:

Leafy Greens subgroup: Amaranth, Chinese; amaranth, leafy; aster, Indian; blackjack; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; corn salad; cosmos; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; huauzontle; jute, leaves; lettuce, bitter; lettuce, head; lettuce, leaf; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; violet, Chinese, leaves; cultivars, varieties, and hybrids of these commodities.

Brassica Leafy Greens subgroup: Arugula; broccoli, Chinese; broccoli raab; cabbage, abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; collards; cress, garden; cress, upland; hanover salad; kale; maca, leaves; mizuna; mustard greens; radish, leaves; rape greens; rocket, wild; shepherd's purse; turnip greens; watercress; cultivars, varieties, and hybrids of these commodities.

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate (fl oz/A)	Application Instructions
Downy mildew (*Bremia lactucae*) (*Peronospora farinosa*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 3 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 41.1 fluid ounces/Acre (0.054 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).
- For applications made to watercress, production fields must be drained of water at least 24 hours prior to each application and water must not be reapplied to the field for a minimum of 48 hours following each application.

LEAF PETIOLE VEGETABLES (Subgroup 22B)[1]

Crops of Crop Subgroup 22B including:

Leaf Petiole Vegetable subgroup: Cardoon; celery; celery, Chinese; fuki; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities.

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate	Application Instructions
Downy mildew (*Peronospora umbellifarum*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 3 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 41.1 fluid ounces/Acre (0.054 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).

[1]Not registered for use on crop subgroup 22B by California.

SMALL FRUIT VINE CLIMBING - EXCEPT FUZZY KIWIFRUIT (Subgroup 13-07F)

Crops of Crop Group 13-07F including:

Amur River Grape; Gooseberry; Grape; Hardy Kiwifruit; Maypop; Schisandra Berry.

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate	Application Instructions
Downy mildew (*Plasmopara viticola*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).

Restrictions:

- Pre-Harvest Interval (PHI): **14 days**
- Minimum interval between applications: **10 days**
- Minimum application volumes: **25 gallons/Acre** (Ground); **10 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 2 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 27.4 fluid ounces/Acre (0.036 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).

TUBEROUS AND CORM VEGETABLES (Subgroup 1C)

Crops of Crop Subgroup 1C including:

Tuberous and corm vegetables subgroup: Arracacha; Arrowroot; Chinese Artichoke; Artichoke, Jerusalem; Canna, Edible; Cassava, Bitter and Sweet; Chayote (Root); Chufa; Dasheen; Ginger; Leren; Potato; Sweet Potato; Tanier; Turmeric; Yam Bean; Yam, True.

Including all cultivars, varieties, and hybrids of these commodities.

Disease Controlled	Application Rate	Application Instructions
Late blight (*Phytophthora infestans*)	13.7 fl oz/A (0.018 lbs fluoxapiprolin/A)	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Tank mix XIVANA PRIME with a second fungicide with a different mode of action that is also labeled on the targeted disease. Apply XIVANA PRIME in sufficient volume carrier (water + tank mix partner) to enable a minimum solution volume of **10 gallons/Acre** ground applications) and **2 gallons/Acre** (aerial applications).

Restrictions:

- Pre-Harvest Interval (PHI): **7 days**
- Minimum interval between applications: **7 days**
- Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)
- Maximum single application rate: 13.7 fl oz/A XIVANA PRIME (0.018 lb/A fluoxapiprolin).
- Maximum number of applications per year: 3 (at 13.7 fl oz/A of XIVANA PRIME).
- Maximum XIVANA PRIME allowed per year: 41.1 fluid ounces/Acre (0.054 lb fluoxapiprolin/Acre)
- Use XIVANA PRIME (or any other Group 49 fungicide) for no more than 33% of the total fungicide applications per season. Where the total number of fungicide applications targeting oomycetes is less than 3, make no more than 1 application of XIVANA PRIME (or any other Group 49 fungicide).

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE:

Store in original container and keep tightly closed when not in use. Store in a cool dry place. Avoid cross-contamination with other pesticides.

PESTICIDE DISPOSAL:

Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be disposed of by use according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

CONTAINER HANDLING:

Non-Refillable Containers

Rigid, Non-refillable containers (equal to or less than 5 gallons)

Non-refillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure 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 1/4 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

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Bayer

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XIVANA® PRIME

FLUOXAPIPROLIN	GROUP 49	FUNGICIDE

For: Fungicide for control or suppression of certain crop diseases

ACTIVE INGREDIENT:	
FLUOXAPIPROLIN*	1.90%
OTHER INGREDIENTS:	98.10%
TOTAL:	100.00%

Contains 0.17 pounds active ingredient per U.S. gallon (20 grams AI/liter)
*CAS No. 1360819-11-9

EPA Reg. No. 264-1226

KEEP OUT OF REACH OF CHILDREN

CAUTION PRECAUCIÓN

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 Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

For **MEDICAL** and **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours a Day 1-800-334-7577. For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID: IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • **DO NOT** give anything by mouth to an unconscious person. **IF ON SKIN OR CLOTHING:** • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice. **IF IN EYES:** • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. **IF INHALED:** • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

• In case of emergency, call the toll-free Bayer CropScience Emergency Response telephone number: 1-800-334-7577. • For medical emergencies, call the poison control center at 1-800-222-1222. • Have a product container or label with you when calling a poison control center or doctor, or going for treatment. • For general information about this product, call 1-866-99BAYER, or contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday during hours of operation, or at http://npic.orst.edu

Note to Physician: Treat symptomatically.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

• Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. • Harmful if swallowed. • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. • Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

DIRECTIONS FOR USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE:** Store in original container and keep tightly closed when not in use. Store in a cool dry place. Avoid cross-contamination with other pesticides. **PESTICIDE DISPOSAL:** Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be disposed of by use according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods. **CONTAINER HANDLING: Non-Refillable Containers: Rigid, Non-refillable containers (equal to or less than 5 gallons).** Non-refillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure 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 1/4 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

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Produced for: Bayer CropScience LLC
800 N. Lindbergh Blvd.
St. Louis, MO 63167

Bayer

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name	XIVANA® PRIME
Product code (UVP)	85401157
SDS Number	102000033755
EPA Registration No.	264-1226

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use	Fungicide
Restrictions on use	See product label for restrictions.

Information on supplier

Supplier	Bayer CropScience LLC 800 North Lindbergh Blvd. St. Louis, MO 63167 USA
Responsible Department	Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days)	1-800-334-7577
Product Information Telephone Number	1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Skin sensitisation: Category 1B

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements
May cause an allergic skin reaction.

Precautionary statements
Avoid breathing mist/ vapours/ spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
IF ON SKIN: Wash with plenty of water/ soap.
If skin irritation or rash occurs: Get medical attention.
Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)
No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Fluoxapiprolin	1360819-11-9	1.90
Docusate sodium	577-11-7	1 – 5

The specific chemical identity and/or concentration range is being withheld because it is trade secret information.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Inhalation Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician or poison control center immediately.

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High volume water jet
Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters	In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Specific hazards from the substance or mixture which can increase the fire

Flash point	> 102 °C / > 215.6 °F at 1,013 hPa
Auto-ignition temperature	420 °C / 788 °F
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not explosive

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Additional advice	Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.
Reference to other sections	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.
Hygiene measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing. Keep away from direct sunlight.
Advice on common storage	Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Fluoxapiprolin	1360819-11-	10 mg/m3		OES BCS*

	9	(TWA)		

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Exposure controls

Personal protective equipment
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.
Hand protection	Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
Eye protection	Tightly fitting safety goggles
Skin and body protection	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form	Liquid
Colour	white to beige
Odour	No data available
Odour Threshold	No data available
pH	5.0 - 7.5 (100 %) (23 °C)
Melting point/ range	No data available
Boiling Point	No data available
Flash point	> 102 °C / > 215.6 °F (1,013 hPa),closed cup
Flammability	No data available
Auto-ignition temperature	420 °C / 788 °F
Thermal decomposition	No data available
Minimum ignition energy	No data available
Self-accelarating decomposition temperature (SADT)	No data available

Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	1.05 g/cm³ (20 °C)
Water solubility	No data available
Partition coefficient: n-octanol/water	Fluoxapiprolin: log Pow: 3.4 (25 °C) (pH 7)
Viscosity, dynamic	300 - 450 mPa.s (20 °C) Velocity gradient 20 /s
Viscosity, kinematic	No data available
Surface tension	32 mN/m (25 °C) Determined as a 0,1% solution in distilled water (1 g/l).
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive
Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	No incompatible materials known.
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Inhalation, Eye contact, Skin contact

Immediate Effects

Eye	Not expected to produce significant adverse effects when recommended use instructions are followed.
Skin	May be harmful in contact with skin. May cause sensitisation by skin contact.
Ingestion	May be harmful if swallowed.
Inhalation	Not expected to produce significant adverse effects when recommended use instructions are followed.

Information on toxicological effects

Acute oral toxicity	LD50 (male/female combined Rat) > 2,000 mg/kg
Acute inhalation toxicity	LC50 (male/female combined Rat) > 4.17 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. Highest attainable concentration.
Acute dermal toxicity	LD50 (male/female combined Rat) > 2,000 mg/kg
Skin corrosion/irritation	No skin irritation (Rabbit)
Serious eye damage/eye irritation	No eye irritation (Rabbit) No eye irritation (Isolated chicken eyes)
Respiratory or skin sensitisation	Skin: Sensitising (Mouse) OECD Test Guideline 429, local lymph node assay (LLNA)

Assessment STOT Specific target organ toxicity – single exposure

Fluoxapiprolin: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Fluoxapiprolin did not cause any significant specific adverse effects or target organ toxicity in subchronic toxicity studies.

Assessment neurotoxicity

Fluoxapiprolin did not demonstrate the potential to cause neurotoxicity in standard toxicity studies using laboratory animals.

Assessment mutagenicity

Fluoxapiprolin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Fluoxapiprolin is not considered carcinogenic.

ACGIH (US)

None.

NTP (US)

None.

IARC (US)

None.

Assessment toxicity to reproduction

Fluoxapiprolin did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Fluoxapiprolin did not cause developmental toxicity in rats and rabbits.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).
No further toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) > 100 mg/l static test; Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) > 100 mg/l static test; Exposure time: 48 h
Chronic toxicity to aquatic invertebrates	NOEC (Daphnia magna (Water flea)): 32 µg/l Exposure time: 21 d The value mentioned relates to the active ingredient.
Toxicity to aquatic plants	ErC50 (Raphidocelis subcapitata (freshwater green alga)) > 96.2 mg/l static test; Exposure time: 72 h
	NOEC (Raphidocelis subcapitata (freshwater green alga)) 11.5 mg/l static test; Exposure time: 72 h
	ErC50 (Lemna gibba (gibbous duckweed)) > 100 mg/l static test; Exposure time: 7 d
Toxicity to other organisms	LC50 (Eisenia fetida (earthworms)) > 1,000 mg/kg Exposure time: 14 d
Biodegradability	Fluoxapiprolin: 0 %, Exposure time: 28 d Not readily biodegradable.
Koc	Fluoxapiprolin: Koc: 6548
Bioaccumulation	Fluoxapiprolin: Bioconcentration factor (BCF) 8.00 - 8.62 Does not bioaccumulate.
Mobility in soil	Fluoxapiprolin: mobile in soil

Results of PBT and vPvB assessment

PBT and vPvB assessment	Fluoxapiprolin: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Additional ecological information	No other effects to be mentioned.
Environmental precautions	Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SECTION 15: REGULATORY INFORMATION

If more information is required, call the product information number listed in Section 1.

EPA Registration No. 264-1226
US Federal Regulations
TSCA list

Water	7732-18-5
Glycerine	56-81-5
Docusate sodium	577-11-7

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
No export notification needs to be made.
SARA Title III - Section 302 - Notification and Information
Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting
None.

US States Regulatory Reporting
CA Prop65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US State Right-To-Know Ingredients

Glycerine	56-81-5	MN, RI

Environmental
CERCLA
None.
Clean Water Section 307(a)(1)
None.
Safe Drinking Water Act Maximum Contaminant Levels
None.

EPA/FIFRA Information:
This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word:	Caution!
Hazard statements:	Harmful if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified

NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 2	Flammability - 1	Instability - 0	Others - none

HMIS (Hazardous Materials Identification System, based on the Fourth Edition Ratings Guide)

Health - 2	Flammability - 1	Physical Hazard - 0	PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard,
* = chronic health hazard

Reason for Revision: The following sections have been revised: Section 11: Toxicological Information. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

Revision Date: 07/21/2026

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.

Antorix™

Trifludimoxazin	Group	14	Herbicide
Saflufenacil	Group	14	Herbicide

Herbicide

For use as a postemergence-directed broadleaf and grass herbicide in the following bearing and nonbearing crops: citrus fruit trees, nut trees, and pome fruit trees

Powered by Tirexor™ and Kixor® herbicides

Active Ingredients:	
trifludimoxazin: 1,5-dimethyl-6-thioxo-3-[2,2,7-trifluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro-2H-1,4-benzoxazin-6-yl]-1,3,5-triazinane-2,4-dione	10.76%
saflufenacil: N'-[2-chloro-4-fluoro-5-(3-methyl-2,6-dioxo-4-(trifluoromethyl)-3,6-dihydro-1(2H)-pyrimidinyl)benzoyl]-N-isopropyl-N-methylsulfamide	21.51%
Other Ingredients:	67.73%
Total:	100.00%

Contains 1.043 pounds active ingredient trifludimoxazin and 2.086 pounds active ingredient saflufenacil per gallon formulated as a water-based suspension concentrate

EPA Reg. No. 7969-493

EPA Est. No. 241-PR-002

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.)

See full label for complete **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Net Contents: 1.72 pints (27.5 fl oz)

4081177771 NVA 2025-05-0657-0194

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713

8 04338 33206 8

BASF
We create chemistry

FIRST AID	
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • **DO NOT** give anything by mouth to an unconscious person.
If in eyes	• Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes. • Call a poison control center for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth to mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling the poison control center 1-800-222-1222 or doctor or going for treatment. You may also contact BASF Agricultural Solutions US LLC (hereafter "BASF") for emergency medical treatment information at 1-800-832-HELP (4357).	

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION. Harmful if swallowed. Remove and wash contaminated clothing before reuse. 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
- Shoes plus socks
- Chemical-resistant gloves

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

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-e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for **applicators and other handlers** and have such PPE immediately available for use in an emergency, including a spill or equipment breakdown.

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

For terrestrial uses, **DO NOT** apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

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

Surface Water Advisory. Trifludimoxazin and saflufenacil may impact surface water due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several weeks after application. A level, well-maintained vegetative buffer strip between

areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of this chemical from runoff water and sediment. Runoff of this product will be reduced by avoiding application when rainfall is forecast to occur within 48 hours.

Non-target Organism Advisory: 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 area. Protect the forage and habitat of non-target organisms by minimizing spray drift.

Pollinator Advisory: This product is potentially toxic to bee larvae. Avoid application of this product to crops in bloom or if bees are actively collecting pollen or nectar from the treatment area.

Reporting Ecological Incidents: For guidance on reporting ecological incidents, see EPA's Pesticide Incident Reporting website: https://www.epa.gov/pesticide-incidents.

Directions For Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at time of herbicide application.

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.

Observe all precautions and restrictions in this label and the labels of products used in combination with **Antorix™ herbicide**. The use of **Antorix** not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, precautions, and **Conditions of Sale and Warranty** are to be followed.

BASF does not advise or authorize the use of this product in manufacturing, processing, or preparing custom blends with other products for application in crops.

Endangered and Threatened Species Protection Requirements

Before using this product, you must obtain any applicable Endangered Species Protection Bulletins ('Bulletins') within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s).

For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.

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**.

EXCEPTION: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, including plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves
- Shoes plus socks

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

DO NOT use or store near heat or open flame. Store in original container in a well-ventilated area separately from fertilizer, feed, or foodstuffs. Avoid cross-contamination with other pesticides.

Pesticide Disposal

Wastes resulting from 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 the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling

Nonrefillable Plastic Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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 1/4 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.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Triple rinse as follows: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

(continued)

STORAGE AND DISPOSAL *(continued)*

Container Handling *(continued)*

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage including cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

In Case of Emergency

In case of large-scale spill of this product, call:

- CHEMTREC 1-800-424-9300
- BASF 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF 1-800-832-HELP (4357)

Steps to take if material is released or spilled:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

Product Information

Antorix™ herbicide provides contact burndown control of broadleaf and select grass weeds (refer to **Table 1** for list). **Antorix** may be used sequentially or tank mixed with another herbicide for a complete weed control program. Refer to **Crop-specific Information** section for recommendations on herbicide tank mixtures or sequential programs.

Make burndown applications of **Antorix** when broadleaf and grass weeds are small and actively growing. Burndown activity may be reduced on weeds previously mowed or cut. An adjuvant is required with **Antorix** for optimum burndown activity (refer to **Additives** section for details). Burndown activity may be slowed or reduced under cloudy and/or foggy or cooler weather conditions, or when weeds are growing in drought or other stress conditions. When targeting dense weed populations and/or larger broadleaf and grass weeds, use higher spray volumes. Angling nozzles forward (to 45 degrees) may improve penetration of denser weed canopies.

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Antorix™ herbicide

Common Name	Scientific Name	C = Control S = Suppression	Maximum Height or Diameter (inches)
Broadleaf Weeds			
Amaranth, palmer[3]	*Amaranthus palmeri*	C	6
Bedstraw, catchweed	*Galium aparine*	C	3
Beggarticks, hairy	*Bidens pilosa*	C	6
Beggarweed, Florida	*Desmodium tortuosum*	C	6
Bindweed, field	*Convolvulus arvensis*	S[1]	6
Buckwheat, wild	*Polygonum convolvulus*	C	6
California burclover	*Medicago polymorpha*	C	5
Canola, volunteer (rapeseed)	*Brassica* spp.	C	6
Carpetweed	*Mollugo verticillata*	C	6
Chickweed, common	*Stellaria media*	C	6
Chickweed, field	*Cerastium arvense*	C	6
Chickweed, mouseear	*Cerastium vulgatum*	C	6
Cocklebur, common	*Xanthium strumarium*	C	6
Cotton, volunteer[2]	*Gossypium hirsutum*	C	6
Cowcockle	*Vaccaria pyramidata*	C	4
Cudweed, purple	*Gnaphalium purpureum*	C	6
Dandelion, common	*Taraxacum officinale*	S	6
Eveningprimrose, cutleaf	*Oenothera laciniata*	C	4
Falseflax, smallseed	*Camelina microcarpa*	C	4
Fiddleneck	*Amsinckia menziesii*	C	4
Filaree, broadleaf	*Erodium botrys*	C	6
Filaree, redstem	*Erodium cicutarium*	S	3
Filaree, whitestem	*Erodium moschatum*	C	6
Fleabane, hairy	*Conyza bonariensis*	C	4 rosette
Flixweed	*Descurainia sophia*	C	6
Geranium/Cranesbill, Carolina	*Geranium carolinianum*	C	6
Goatweed	*Scoparia dulcis*	C	6
Groundcherry, cutleaf	*Physalis angulata*	C	6
Groundsel, cressleaf	*Senecio glabellus*	C	6
Groundsel, common	*Senecio vulgaris*	C	4

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Antorix™ herbicide *(continued)*

Common Name	Scientific Name	C = Control S = Suppression	Maximum Height or Diameter (inches)
Broadleaf Weeds *(continued)*			
Hairy indigo	*Indigofera hirsuta*	C	4
Hawksbeard, narrowleaf[2]	*Crepis tectorum*	C	4
Hemlock, poison[2]	*Conium maculatum*	C	6
Henbit	*Lamium amplexicaule*	C	6
Jointvetch, Indian	*Aeschynomene indica*	C	4
Knotweed, common	*Polygonum arenastrum*	C	4
Knotweed, prostrate	*Polygonum aviculare*	C	3
Kochia	*Kochia scoparia*	C	1-inch to 3-inch Suppression of button/puffball stage at < 1-inch tall
Ladysthumb	*Polygonum persicaria*	C	6
Lambsquarters, common	*Chenopodium album*	C	6
Lambsquarters, narrowleaf	*Chenopodium pratericola*	C	6
Lettuce, prickly	*Lactuca serriola*	C	6 rosette
Mallow, common	*Malva neglecta*	C	6
Mallow, little (Cheeseweed)	*Malva parviflora*	C	3
Mallow, Venice	*Hibiscus trionum*	C	6
Marestail (Horseweed)	*Conyza canadensis*	C	4
Marshelder	*Iva xanthifolia*	C	4
Morningglory, entireleaf	*Ipomoea hederacea* var. *integriuscula*	C	6
Morningglory, ivyleaf	*Ipomoea hederacea*	C	6
Morningglory, palmleaf	*Ipomoea wrightii*	C	6
Morningglory, pitted	*Ipomoea lacunosa*	C	6
Morningglory, tall	*Ipomoea purpurea*	C	6
Mustard, black	*Brassica nigra*	C	6 rosette
Mustard, tumble	*Sisymbrium altissimum*	C	6 rosette
Mustard, wild	*Sinapis arvensis*	C	6 rosette
Needles, Spanish[2]	*Bidens pilosa*	C	6
Nettle, burning	*Urtica urens*	C	4
Nightshade, black	*Solanum, nigrum*	C	6
Nightshade, cutleaf	*Solanum, triflorum*	C	6

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Antorix™ herbicide *(continued)*

Common Name	Scientific Name	C = Control S = Suppression	Maximum Height or Diameter (inches)
Broadleaf Weeds *(continued)*			
Nightshade, Eastern black	*Solanum, ptycanthum*	C	6
Nightshade, hairy	*Solanum, saccharoides*	C	6
Panicle willowherb	*Epilobium brachycarpum*	C	6
Parthenium (ragweed)	*Parthenium hysterophorus*	C	6
Pennycress, field	*Thlaspi arvense*	C	6
Pigweed, green	*Amaranthus viridus*	C	6
Pigweed, prostrate	*Amaranthus blitoides*	C	6
Pigweed, redroot	*Amaranthus retroflexus*	C	6
Pigweed, smooth	*Amaranthus hybridus*	C	6
Puncturevine	*Tribulus terrestris*	C	6
Purslane, common	*Portulaca oleracea*	C	3
Pusley, Florida	*Richardia scabra*	C	3
Radish, wild	*Raphanus raphanistrum*	C	4
Ragweed, common[3]	*Ambrosia artemisiifolia*	C	6
Ragweed, giant	*Ambrosia trifida*	C	6
Redmaids	*Calandrinia ciliata*	C	6
Rocket, London	*Sisymbrium irio*	C	6
Sesbania, hemp	*Sesbania exaltata*	C	4
Shepherd's-purse	*Capsella bursa-pastoris*	C	6
Sida, arrowleaf	*Sida rhombifolia*	C	6
Sida, prickly	*Sida spinosa*	C	6
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	C	6
Sowthistle, annual	*Sonchus oleraceus*	C	6 rosette
Sowthistle, spiny	*Sonchus asper*	C	6 rosette
Spurge, leafy	*Euphorbia esula*	C	4
Spurge, spotted	*Euphorbia maculata*	C	6
Sunflower, common	*Helianthus annuus*	C	6
Swinecress, lesser	*Coronopus didymus*	C	4
Tansymustard, pinnate	*Descurainia pinnata*	C	6
Texasweed	*Caperonia palustris*	C	4

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Antorix™ herbicide *(continued)*

Common Name	Scientific Name	C = Control S = Suppression	Maximum Height or Diameter (inches)
Broadleaf Weeds *(continued)*			
Thistle, Canada	*Cirsium arvense*	C	6
Thistle, Russian	*Salsola kali*	C	3
Tropical spiderwort	*Commelina benghalensis*	C	4
Velvetleaf	*Abutilon theophrasti*	C	6
Vetch, common	*Vicia sativa*	C	4
Waterhemp[3]	*Amaranthus tuberculatus*	C	6
Willowweed	*Epilobium adenocaulon*	C	3
Woolly Croton	*Croton capitatus*	C	4
Grass Weeds			
Barnyardgrass	*Echinochloa crus-galli*	C	3
Bluegrass, annual	*Poa annua*	C	2
Crabgrass, large	*Digitaria sanguinalis*	S	4
Foxtail, giant	*Setaria faberi*	C	2
Goosegrass	*Eleusine indica*	S	3
Ryegrass, Italian	*Lolium multiflorum*	S	2
Signalgrass, broadleaf	*Brachiaria platyphylla*	S	2

[1] Control of seedling stage and suppression of perennial growth stage.
[2] Not controlled in California
[3] Populations of noted weeds exist that are known to be resistant to burndown applications of **Group 14** herbicides and may not be controlled by herbicides like **Antorix**. See the **Herbicide Resistance Management** section for practices to manage and minimize the impact of resistant weeds (e.g. tank mixes or alternation with other herbicide modes of action, crop rotation, and mechanical control).

Mode of Action

Saflufenacil and trifludimoxazin, the active ingredients in **Antorix™ herbicide**, are potent inhibitors of protoporphyrinogen-oxidase belonging to herbicide mode of action **Group 14**. **Antorix** is rapidly absorbed by roots and foliage. Following inhibition of protoporphyrinogen-oxidase, plant death is the result of membrane damage. Under active growing conditions, susceptible emerged weeds usually develop chlorotic and necrotic injury symptoms within hours and die within a few days. Susceptible emerging weed seedlings usually die as they reach the soil surface or shortly after emergence.

Herbicide Resistance Management

Any weed population may contain or develop plants naturally resistant to **Antorix** and other **Group 14** herbicides. Weed species with resistance to **Group 14** may dominate the weed population if **Group 14** herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Antorix** or other **Group 14** herbicides. Proper stewardship practices should be employed to ensure the long-term effectiveness of **Antorix** including mixture or sequential use of other effective herbicides to mitigate resistance development with **Antorix**.

To delay herbicide resistance, consider:

- Resistance management should be part of a diversified weed control strategy that integrates chemical, cultural, and mechanical (tillage) control tactics. Cultural control tactics include crop rotation, proper fertilizer placement, and optimum seeding rate/row spacing. Start with clean fields using tillage or an effective burndown herbicide program. These practices encourage crop growth and improve competitiveness against weeds.
- Clean equipment before moving to a different field to avoid spread of resistant weeds.
- Scout fields prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.
- Always follow labeled application rate and weed growth stage specifications.
- Use sequential programs with preemergence herbicides that provide soil residual control of weeds to reduce early season weed competition and allow for timely in-crop postemergence herbicide applications.
- **DO NOT** rely on a single herbicide site of action for weed control during the growing season.
- Avoid application of herbicides with the same site of action more than twice a season.
- Use tank mixes or premixes with other herbicides possessing different sites of action that are also effective on the target weeds.
- Scout fields after herbicide application to identify areas where weed control was ineffective.
- Control weed escapes with herbicides possessing a different site of action or use a mechanical control measure. Weed escapes should not be allowed to reproduce by seed or to proliferate vegetatively.
- If a weed 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.
- Contact your **Antorix** supplier and/or your local BASF representative to report weed escapes.
- Consult your local BASF representative, local or state cooperative extension service, professional consultants or crop advisors, or other qualified authority to determine appropriate actions if you suspect resistant weeds.
- Suspected herbicide-resistant weeds may be identified by these indicators:
  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 noncontrolled plants of a particular weed species; and
  3. Surviving plants mixed with controlled individuals of the same species.

Crop Tolerance

Crops listed on this label are tolerant to **Antorix** when applied according to label directions as a postemergence-directed treatment and under normal environmental conditions. Crop injury may occur under stressful growing conditions (e.g. low soil fertility, seedling disease, extreme hot or cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought).

Severe crop injury will result if **Antorix** is applied postemergence (over the top) to any tree crop.

Application Instructions

Antorix must be applied as a postemergence-directed spray application either as a uniform broadcast, banded, or spot application to emerged broadleaf and grass weeds.

Table 3. Use Rate Equivalency

Amount of Antorix (fl ozs/A)	**Amount of Saflufenacil** (lb ai/A)	**Amount of Trifludimoxazin** (lb ai/A)
1.4	0.023	0.011
2.0	0.033	0.016
2.73	0.044	0.022

Application Methods and Equipment

Antorix can **ONLY** be applied using ground spray equipment. Thorough spray coverage is required for optimum broadleaf and grass weed control and can be improved with proper adjuvant, nozzle, and spray volume selection.

Use and configure application equipment for adequate spray volume, accurate and uniform distribution of spray droplets over the treated area, and to avoid spray drift to nontarget areas. Adjust equipment to maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above use rates specified in this label. **DO NOT** apply broadcast or banded using high pressure hand wands.

Antorix may **ONLY** be applied using water as the spray carrier.

Ground Spray Carrier Volume. Use 10 to 15 or more gallons of water per treated acre. Increased efficacy has been observed at water volumes of 20 to 40 gallons per acre. Thorough spray coverage is required for control of emerged broadleaf and grass weeds. High populations and/or variations in size can prevent thorough spray coverage. Controlling fall-germinated weeds in the spring (e.g. horseweed/marestail) also requires thorough spray coverage. Use higher spray volumes (e.g. 15 to 20 gallons of water per acre) in these situations to increase spray coverage and optimize burndown activity.

Ground Spray Nozzle Selection. Applicators must select nozzles and pressure that deliver coarse to very coarse droplets as indicated in nozzle manufacturer's catalogues and in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE §572). Nozzles that deliver coarse or very coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of target (i.e., weeds).

Spray Drift Retardants. Addition of some spray drift retardants (drift reducing agents, e.g. DRA) can significantly increase the droplet size but reduce spray coverage and efficacy. If a spray drift retardant is used, ensure that it is compatible for use with **Antorix™ herbicide** and spray equipment being used and the desired level of weed control is maintained.

Cleaning Spray Equipment

Before applying **Antorix** all application equipment must be thoroughly cleaned. All spray equipment, hoses, and nozzles must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply **Antorix**.

Spray equipment used to apply **Antorix** should not be used to apply other materials to any crop unless the proper cleanout procedures are followed. Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions, followed by triple rinsing the equipment after applying this product.

Mitigating Off-Target Movement

MANDATORY SPRAY DRIFT MANAGEMENT

All Ground Boom Applications

- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- Wind speed and direction must be measured on location using a windsock or an anemometer (including systems to measure wind speed or velocity on ground application equipment).
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes) must register between 3 and 15 miles per hour.
- **DO NOT** apply during temperature inversions.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a nozzle height of 24 inches above the spray target (i.e., top of weed canopy). Set boom to lowest effective height over the target pest based on equipment manufacturer's directions.
- Applicators should select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure, but **DO NOT** exceed a ground speed of 15 miles per hour.

Mandatory Spray Drift Mitigations

Ecological spray drift buffers are required for this product for ground boom applications to field crops. Access EPA's **Mitigation Menu** website (www.epa.gov/pesticides/mitigation-menu) for the full list of parameters to evaluate whether your field is subject to the required spray drift buffer.

Applicators must access and search **Bulletins Live! Two** (BLT) at https://www.epa.gov/pesticides/bulletins within six months prior to or on the day of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA). If you are located inside a PULA, follow the instructions in the BLT bulletin. If the application site falls outside of a PULA, follow the instructions in the "Outside a PULA" section below. Additional restrictions may be present in bulletins—always follow the most restrictive bulletin instructions.

Outside a PULA. A minimum down-wind spray drift buffer must be maintained between the application area and any unmanaged areas for applications to field crops. Unmanaged areas are defined in comparison to managed areas – anything that is not a managed area is an unmanaged area. Refer to the list of **Managed Areas** in this label.

Mandatory Spray Drift Buffers

For ground applications, maintain a wind-directional (downwind) buffer distance from the edge of the treated area as follows:

Application Method	Minimum Required Buffer Distance
Ground	15 feet

Reduction Options for All Ecological Wind-Directional Drift Buffers

The applicator may choose among the ecological drift buffer reduction options on EPA's **Mitigation Menu** website (http://www.epa.gov/pesticides/mitigation-menu) to reduce the wind-directional buffer distance before applying this product. All buffer reduction options selected must align with the minimum droplet size and release height requirements on this label.

Examples of buffer reduction options include: using larger droplets, lowering the boom height, reducing the maximum single application rate, reducing the number of passes across the field, maintaining a windbreak or hedgerow, or using directed sprayers.

The buffer reduction options must be employed in accordance with the instructions and descriptions on EPA's **Mitigation Menu** website. When using more than one option during the application, the percent reduction in the buffer distances may be added together. The maximum buffer reduction that can be achieved by a combination of buffer reduction options is 100% (i.e., no drift buffer).

Additional restrictions may be present in bulletins—always follow the most restrictive bulletin instructions. If you are located in an area where PULAs overlap, follow the most restrictive requirements across all bulletins. When tank mixing, the most restrictive of the products' label or bulletin requirements must be followed (e.g., drift buffers that are not wind-directional, Application Exclusion Zone drift requirements, drift buffers to residences, schools, and parks where people could be present, use prohibitions, timing restrictions, and application method prohibitions).

Managed Areas

Managed areas that can be included as part of wind-directional spray drift buffer footage include the following:

- Agricultural fields, pastures, forage fields, and private rangelands, including untreated portions of the treated field/site;
- Roads, paved or gravel surfaces, mowed grassy/fallowed areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated area;
- Buildings and their perimeters, or other on-farm man-made structures with walls and/or roof;
- Areas present and/or maintained as a runoff/erosion measure as listed on EPA's **Mitigation Menu** website. Examples include vegetative filter strips (VFS), field borders, grassed waterways, vegetated ditches, riparian areas, managed/constructed wetlands, or other areas of intentional habitat improvement;
- Areas present and/or maintained as a drift buffer reduction measure as listed on EPA's **Mitigation Menu** website. Examples include vegetative windbreaks, hedgerows, shelterbelts, riparian areas, private forests, woodlots, and shrublands;
- Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) lands;

• On-site contained irrigation water resources that are not connected to adjacent water bodies, including on-site irrigation canals and ditches, water conveyances, managed irrigation/runoff retention basins, ponds, and tailwater collection ponds.

Managed areas can be included as part of the buffer footage if they are downwind and immediately adjacent/contiguous to the treated field and people are not present in those areas.

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 specified 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.

Release Height - Ground Boom
For ground equipment, the boom should remain level with the crop and have minimal bounce. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.

Hooded (or Shielded) Sprayers
Shielding the boom or individual nozzles can reduce spray drift. Consider using hooded (or shielded) sprayers. Verify that the hoods (or 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 Inversion
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.

Wind
Drift potential generally increases with wind speed. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Measuring Wind Speed and Wind Direction
- Applicators should check and acquire the predicted wind speed and direction for the application site within 12 hours prior to conducting applications to determine the time periods wind speed is likely to fall outside the applicable thresholds.
- Applicators should reassess wind speed and direction at the application site at least every hour while applications are in progress.
- Measuring wind speed and direction can be done by:
  - Relying on equipment on the application equipment that measures wind speed.
  - Using a tower anemometer with telemetry or handheld anemometer. Users should read user manual on how to calibrate, operate and interpret the output from an anemometer. Ground applicators should stop at least every hour to take a reading with a tower anemometer with telemetry or handheld anemometer. Some anemometers may have software that would allow users to view wind measurements in real time while making an application, and, those cases, applicators would not have to stop to take measurements.
  - Using a windsock. Wind can be estimated with a wind-sock using the strips on a windsock. The applicator should consult the user manual for the windsock on wind speed estimation and direction of wind. Applicators should look at the sock at least every hour to estimate wind speed and direction.
  - Checking behind the spray rig at least every hour to see if the spray has changed direction from when the application started.

Mandatory Runoff Mitigation

Applicators must access and search **Bulletins Live! Two** (BLT) at https://www.epa.gov/pesticides/bulletins within six months prior to or on the day of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA). If you are located inside a PULA, follow the instructions in the the BLT bulletin. If the application site falls outside of a PULA, follow the instructions in the section below.

The minimum of 6 mitigation points must be achieved for the following agricultural crop use sites: bearing and non-bearing fruit and nut trees.

Step 1. To achieve the mitigation points specified above, visit EPA's **Mitigation Menu** website (http://www.epa.gov/pesticides/mitigation-menu) for a full list of mitigation and mitigation relief options.

Step 2. Determine if you are eligible for mitigation relief. Runoff/erosion mitigation is NOT required if certain field/application parameters are present at the time of application (e.g., subsurface or tile drains with controlled outlet, perimeter berm systems, irrigation tailwater return systems, spot treatment, etc).

Step 3. If the application site does not meet the field/application parameters specified on EPA's **Mitigation Menu** website, choose among the mitigation and/or mitigation relief options on EPA's **Mitigation Menu** website to meet or exceed the required points noted here before applying this product.

Step 4. To achieve mitigation points for the application, the mitigation and mitigation relief measures must be:
- Employed in accordance with the instructions and descriptions on EPA's **Mitigation Menu** website.
- In place during the application unless a different timing (such as before or after application) is specifically provided in the measure's description on EPA's **Mitigation Menu** website. EPA may periodically update the **Mitigation Menu** website, for example, by adding new mitigation measures or updating a mitigation measure description.

Step 5. Additional restrictions may be present in bulletins—always follow the most restrictive bulletin instructions. If you are located in an area where PULAs overlap, follow the most restrictive requirements across all bulletins. When tank mixing, the most restrictive requirements must be followed between the products' labels and bulletins.

Additives

For optimum burndown with **Antorix™ herbicide**, an adjuvant system must be used that includes the following:

Adjuvant	Rate
methylated seed oil[1] (MSO)	1 gal/100 gals[2] (1% v/v)
PLUS	**PLUS**
ammonium sulfate (AMS)	8.5 to 17 lbs/100 gals (1% to 2% w/v)
or	**or**
urea ammonium nitrate (UAN)	1.25 to 2.5 gals/100 gals (1.25% to 2.5% v/v)

[1] MSO-based adjuvant **MUST** contain at least 60% methylated seed oil. Poor performance may occur with adjuvants containing less than 60% methylated seed oil.

[2] **DO NOT** use less than 1 pint/A of MSO with low-volume (less than 12.5 gallons per acre) ground application.

Use of AMS fertilizer is highly advised when mixing **Antorix** with glyphosate-based herbicides and glufosinate-based herbicides.

DO NOT use nonionic surfactant (NIS) as a substitute for MSO, or poor performance on broadleaf and/or grass weeds will occur.

When an adjuvant is to be used with this product, BASF recommends the use of a Council of Producers & Distributors of Agrotechnology (CPDA) certified adjuvant.

Tank Mixing Information

It is the pesticide user's responsibility to ensure that all products in the mixtures are registered for the intended use. Read and follow the applicable restrictions and precautions and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Antorix may be tank mixed or applied sequentially with other herbicide products registered for use in any labeled crop found in this label for a broader spectrum of control of emerged weeds and/or residual weed control. Refer to the tank mix product labels to confirm that the respective tank mix products are registered for use on the labeled crop. Read and follow tank mix product labels for application instructions, use restrictions and precautions, and rotational cropping guidance.

When tank mixing, the most restrictive of the products' label or bulletin (BLT) requirements must be followed (e.g., use prohibition, timing restriction, application method restriction, sandy soil application restriction, etc.).

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

1. For 20 gallons per acre spray volume, use 3.3 cups (800 mL) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.
2. Add components in the sequence indicated in **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of label rate per acre.
3. Always cap the jar and invert 10 cycles between component additions.
4. When the components have all been added to the jar, let the solution stand for 15 minutes.
5. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, or fine particles that precipitate to the bottom, or thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

Mixing Order

Maintain agitation throughout mixing and application until spraying is completed.

1. **Water** - Fill tank 1/2 to 3/4 full with clean water and start agitation.
2. **Inductor** - If an inductor is used, rinse it thoroughly after each component has been added.
3. **Products in PVA bags** - Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
4. **Water-soluble additives** (including dry and liquid fertilizers AMS or UAN)
5. **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions, add **Antorix** now)
6. **Water-soluble products**
7. **Emulsifiable concentrates** (including MSO adjuvants)
8. **Remaining quantity of water**

If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.

Use Restrictions

- **Maximum annual use rate** - Refer to **Crop-specific Information** section for maximum application use rates for each crop use.
- If additional saflufenacil and/or trifludimoxazin is applied from other product sources, refer to the **Crop-specific Restrictions** section for each crop use for the maximum cumulative amount per year.
- **DO NOT** apply **Antorix** by aerial spray.
- **DO NOT** contaminate water used for irrigation or domestic purposes.
- **DO NOT** apply **Antorix** through any type of irrigation system (e.g. chemigation).
- **DO NOT** apply during rain.

- **DO NOT** apply this product when soil is saturated or at field capacity, or when a storm event likely to produce runoff from the treated area is expected to occur within 24 hours following application.
- Within 24 hours after application, **DO NOT** irrigate the treatment area to the point of runoff.
- **Antorix™ herbicide is not for sale, distribution, or use in Alaska, Hawaii, US Territories (including American Samoa, Guam, Puerto Rico, Mariana Islands, US Virgin Islands), and in Nassau and Suffolk counties in New York State.**

Use Precautions

- **Rainfastness** - **Antorix** is rainfast 1 hour after application. Burndown activity may be reduced if rain or irrigation occurs within 1 hour of application.
- **Emergency Replanting Intervals** - If any labeled crop treated with **Antorix** is lost to adverse weather or for other reasons, the area treated may be replanted to citrus fruit trees 1 month after treatment and to nut trees and pome fruit trees 3 months after treatment. Corn and small grains may be planted immediately after crop removal. Wait 9 months before planting any other crop. Be sure to determine the rotational crop interval for tank mix products and follow the most restrictive interval of all products applied.

Crop-specific Information

This section provides use directions for **Antorix** in specific crops. Read product information, mixing, application, weeds controlled, and adjuvant instructions in preceding sections of the label. Read and follow tank mix product labels for restrictions, precautions, instructions, and rotational crop restrictions.

Thorough spray coverage is required for control of emerged broadleaf and grass weeds. High populations and/or variations in size can prevent adequate spray coverage. Controlling fall-germinated weeds in the spring (e.g. horseweed/marestail) also requires thorough spray coverage. Use higher spray volumes (e.g. 15 to 20 gallons of water per acre) in these situations to increase spray coverage and optimize burndown activity.

Bearing and Nonbearing Fruit and Nut Trees

Antorix may be applied in the following individual bearing or nonbearing fruit tree and tree nut crops:

Citrus Fruits
Citrus citron
Clementine
Grapefruit
Lemon
Lime
Mandarin (satsuma)
Orange (sweet)
Pummelo
Tangelo
Tangerine
Pome Fruits
Apple
Pear
Tree Nuts
Almond
Filbert (hazelnut)*
Pistachio
Walnut

* Not for use in California.

Application Rate, Method, and Timing

Apply **Antorix** at 2.73 fl ozs/A in citrus fruit, pome fruit, and tree nuts plus the required adjuvants (refer to **Additives** section for details) as a postemergence-directed spray either as a uniform broadcast, banded, or spot application directed at the base of the tree trunks while targeting emerged broadleaf weeds and grasses (refer to **Table 1** for weeds controlled). **Antorix** can **ONLY** be applied using ground spray equipment. Spray contact of tree foliage, flowers, buds, or fruit either directly via improper nozzle orientation or indirectly via physical drift will result in crop injury. The use of shielded sprayers is highly advised when applying in citrus trees and other trees with low-hanging branches and fruit.

Applications can be made to newly planted or replacement citrus trees after irrigation or rainfall has settled the soil; nut trees and pome fruit trees must be established for at least 9 months before application. Trunk shields must be used until adequate bark has formed to protect trees from potential herbicide injury (typically by 2 to 3 years after establishment).

Antorix may be applied either in a single application or sequentially up to 3 times per year with applications occurring either in-season or separated between dormant period and in-season as described in paragraphs that follow. Sequential applications must be separated by at least 30 days regardless of the time of year.

Dormant Period Application in Tree Nuts and Pome Fruit Trees. Antorix™ herbicide may be applied during the dormant period of postharvest through winter dormancy. Make one or two (no more than two) applications of **Antorix** during the period of postharvest through winter dormancy. In-season **Antorix** applications may begin in the spring when trees are in the bud-swell stage. A maximum of three (3) **Antorix** applications are permitted per year (i.e., across tree growth periods including postharvest through winter dormancy, and bud-swell to crop harvest).

Spot Treatment

Consult the following chart for the amount of **Antorix** for making various gallons of spray mix to be used for spot treatments applied to actively growing broadleaf and grass weeds and sizes in **Table 1**. Coverage is important. Spray thoroughly to wet the weed foliage but not to point of runoff. To maximize performance, refer to the **Additives** section for the adjuvant and rate to be added to the spray mix. Each spray mix is equivalent to applying **Antorix** at a use rate of 2.73 fl ozs/A in a spray volume of 100 gallons per acre. Application of a spot spray mix must not be made to an equivalent area less than what is shown in the chart or exceed the equivalent broadcast rate of 2.73 fl ozs/A. Spot treatments may be applied with backpack sprayers or via an ATV-mounted (all-terrain vehicle-mounted) or tractor/truck mounted sprayers equipped for hand wand applications. Spot applications can be made sequentially and/or be combined with broadcast/banded applications, but the maximum cumulative amount applied must not exceed the total use rate for the crop per year (see **Crop-specific Restrictions**). **DO NOT** apply spot treatments using high-pressure hand wands.

Gallons Spray Mix	**Spray Mix Treatment Area** (sq ft)	**Amount of Antorix**	
		(mL)	(fl ozs)
5.0	2,178	4	0.14
10.0	4,356	8	0.27
25.0	10,890	20	0.68
50.0	21,780	40	1.35

Crop-specific Restrictions

- **DO NOT** apply more than 2.73 fl ozs/A of **Antorix** (0.044 lb ai/A saflufenacil + 0.022 lb ai/A trifludimoxazin) in a single application in bearing and nonbearing fruit/nut trees.
- **DO NOT** apply more than 8.25 fl ozs/A of **Antorix** (0.134 lb ai/A saflufenacil + 0.067 lb ai/A trifludimoxazin) as a maximum cumulative amount from sequential applications per year in bearing and nonbearing fruit/nut trees.
- Sequential applications must be separated by at least 30 days.
- Maximum number of applications per year: 3
- If additional saflufenacil is applied from other product sources, **DO NOT** apply more than the following maximum cumulative amount of saflufenacil per year in bearing and nonbearing fruit/nut trees: 0.134 lb ai/A.
- If additional trifludimoxazin is applied from other product sources, **DO NOT** apply more than the following maximum cumulative amount of trifludimoxazin per year in bearing and nonbearing fruit/nut trees: 0.089 lb ai/A.
- For spot applications, apply as needed for the desired weed control but **DO NOT** exceed the equivalent of 0.066 lb ai/A (0.063 fl oz per 1000 square feet) per application or 0.201 lb ai/A (0.189 fl oz per 1000 square feet) from applications per year.
- **Antorix** may be applied any time up to or on the day of citrus or pome fruit harvest.
- **Preharvest interval (PHI)** for tree nuts: 7 days.
- **DO NOT** use in tree nurseries.

Tank Mixes

Broad-spectrum postemergence control of additional annual and perennial weeds will usually require a tank mix with a herbicide including glyphosate. **Antorix** may be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products for additional burndown or residual weed control:

- glufosinate-ammonium
- glyphosate
- indaziflam
- oxyfluorfen
- pendimethalin
- rimsulfuron

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF Agricultural Solutions US LLC ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF. 1108

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BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713

BASF
We create chemistry

Antorix™

Trifludimoxazin	Group	14	Herbicide
Saflufenacil	Group	14	Herbicide

Herbicide

For use as a postemergence-directed broadleaf and grass herbicide in the following bearing and nonbearing crops: citrus fruit trees, nut trees, and pome fruit trees

Powered by Tirexor™ and Kixor® herbicides

Active Ingredients:

trifludimoxazin: 1,5-dimethyl-6-thioxo-3-[2,2,7-trifluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro-2H-1,4-benzoxazin-6-yl]-1,3,5-triazinane-2,4-dione 10.76%

saflufenacil: N'-[2-chloro-4-fluoro-5-(3-methyl-2,6-dioxo-4-(trifluoromethyl)-3,6-dihydro-1(2H)-pyrimidinyl)benzoyl]-N-isopropyl-N-methylsulfamide 21.51%

Other Ingredients: 67.73%

Total: 100.00%

Contains 1.043 pounds active ingredient trifludimoxazin and 2.086 pounds active ingredient saflufenacil per gallon formulated as a water-based suspension concentrate

EPA Reg. No. 7969-493 **EPA Est. No. 241-PR-002**

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.)

See attached label for complete **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

FIRST AID

If swallowed: Call a poison control center or doctor immediately for treatment advice. **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. **DO NOT** give anything by mouth to an unconscious person. **If in eyes:** Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes. Call a poison control center for treatment advice. **If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth to mouth, if possible. Call a poison control center or doctor for further treatment advice.

HOTLINE NUMBER

Have the product container or label with you when calling the poison control center 1-800-222-1222 or doctor or going for treatment. You may also contact BASF Agricultural Solutions US LLC (hereafter "BASF") for emergency medical treatment information at 1-800-832-HELP (4357).

Precautionary Statements: Hazards to Humans and Domestic Animals. CAUTION. Harmful if swallowed. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. **Environmental Hazards:** For terrestrial uses, **DO NOT** apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate. See attached booklet for full **Environmental Hazards**, inculding **Groundwater Advisory**, **Surface Water Advisory**, **Non-target Organism Advisory**, **Pollinator Advisory**, and **Reporting Ecological Incidents**.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. **Pesticide Storage: DO NOT** use or store near heat or open flame. Store in original container in a well-ventilated area separately from fertilizer, feed, or foodstuffs. Avoid cross-contamination with other pesticides. **Pesticide Disposal:** Wastes resulting from 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 the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **Container Handling: Nonrefillable Plastic Container. DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. **Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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 1/4 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. **Triple rinse containers too large to shake (capacity > 5 gallons) as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. **Triple rinse as follows:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage including cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

Net Contents: 1.72 pints (27.5 fl oz)

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Safety Data Sheet
Antorix™ Herbicide

1. Identification

Product identifier used on the label

Antorix™ Herbicide

Recommended use of the chemical and restriction on use

Recommended use*: crop protection product, herbicide

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27709
USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number:	892280
Chemical family:	No applicable information available.
Synonyms:	Trifludimoxazin + Saflufenacil

2. Hazards Identification

According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Repr.	1B (fertility)	Reproductive toxicity
Repr.	2 (unborn child)	Reproductive toxicity
STOT RE	2	Specific target organ toxicity — repeated exposure

Aquatic Acute	1	Hazardous to the aquatic environment - acute
Aquatic Chronic	1	Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

H373	May cause damage to organs through prolonged or repeated exposure.
H360	May damage fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing and eye protection or face protection.
P260	Do not breathe mist or vapour.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.

Precautionary Statements (Response):

P308 + P313	IF exposed or concerned: Get medical attention.
P391	Collect spillage.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified

Labeling of special preparations (GHS):
Product contains the following components and may cause an allergic skin reaction: The substance may cause sensitization of the skin in particularly sensitive individuals. Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. 1,2-benzisothiazol-3(2H)-one, mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

3. Composition / Information on Ingredients

According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Saflufenacil
CAS Number: 372137-35-4

Content (W/W): 21.51 %
Synonym: Saflufenacil

1,3,5-Triazine-2,4(1H,3H)-dione, dihydro-1,5-dimethyl-6-thioxo-3-[2,2,7-trifluoro-3,4-dihydro-3-oxo-4-(2-propyn-1-yl)-2H-1,4-benzoxazin-6-yl]-
CAS Number: 1258836-72-4
Content (W/W): 10.76 %
Synonym: No data available.

Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt
Content (W/W): >= 1.0 - < 5.0%
Synonym: No data available.

bronopol
CAS Number: 52-51-7
Content (W/W): < 0.1%
Synonym: 2-Bromo-2-nitro-1,3-propanediol; Bronopol

mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
CAS Number: 55965-84-9
Content (W/W): < 0.1%
Synonym: 5-Chloro-2-methyl-3(2H)-isothiazolone mixt. with 2-methyl-3(2H)-isothiazolone

1,2-benzisothiazol-3(2H)-one
CAS Number: 2634-33-5
Content (W/W): <= 0.1%
Synonym: No data available.

The actual concentration is withheld as a trade secret.

4. First-Aid Measures

Description of first aid measures

General advice:
First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far
Hazards: No applicable information available.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, hydrogen fluoride, hydrogen bromide, Hydrogen chloride, nitrogen oxides, silicon oxides, sulfur oxides, halogenated compounds, cyanides
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then

spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:
No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

Saflufenacil	TWA value 0.824 mg/m3 ;

Advice on system design:
No applicable information available.

Personal protective equipment
RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:
Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:
Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Physical state:	liquid
Form:	liquid
Odour:	faint, sweetish
Odour threshold:	Not determined due to potential health hazard by inhalation.
Colour:	off-white
pH value:	approx. 5 - 7 (100 %(m), 23 °C)
Freezing point:	approx. -5 °C
Boiling point:	> 110 °C
Sublimation point:	No applicable information available.
Flash point:	Non-flammable.
Flammability:	not applicable
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Autoignition:	460 °C
SADT:	> 75 °C
Vapour pressure:	approx. 23 hPa (20 °C) Information applies to the solvent.
Density:	approx. 1.16 g/cm3 (20 °C)
Relative vapour density:	not applicable
Partitioning coefficient n-octanol/water (log Pow):	The statements are based on the properties of the individual components.
Information on: saflufenacil	
Partitioning coefficient n-octanol/water (log Pow):	2.6 (20 °C)
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Thermal decomposition:	> 190 °C, 620 kJ/kg (DSC (OECD 113)) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Viscosity, dynamic:	approx. 58 mPa.s (20 °C)

Viscosity, kinematic:	No data available.
Solubility in water:	dispersible
Solubility (quantitative):	No data available.
Solubility (qualitative):	No data available.
Molecular weight:	No data available.
Evaporation rate:	not applicable
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

Particle characteristics
Particle size distribution: The substance / product is marketed or used in a non solid or granular form.

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:
not fire-propagating

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
See SDS section 7 - Handling and storage.

Incompatible materials
strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
> 190 °C (DSC (OECD 113))

Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Oral
Type of value: LD50
Species: rat (female)
Value: > 2,000 mg/kg
No mortality was observed.

Inhalation
Type of value: LC50
Species: rat (male/female)
Value: > 3.4 mg/l
Exposure time: 4 h
An aerosol was tested.
Highest concentration technically achievable.

Dermal
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg
No mortality was observed.

Assessment other acute effects
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion
Assessment of irritating effects: Not irritating to eyes and skin.

Skin
Species: rabbit
Result: non-irritant

Eye
Species: rabbit
Result: non-irritant

Sensitization
Assessment of sensitization: The product contains 1,2-benzisothiazolin-3-one (CAS-No.: 2634-33-5). The product contains a mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) (CAS-No.:55965-84-9). The substance may cause sensitization of the skin in particularly sensitive individuals. Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Buehler test
Species: guinea pig
Result: Non-sensitizing.

Aspiration Hazard
not applicable

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin
Assessment of repeated dose toxicity: Repeated oral exposure may affect certain organs.

Genetic toxicity
Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity
Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin
Assessment of carcinogenicity: In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. Due to the species specific mode of action, the effects are not expected to occur in humans.

Reproductive toxicity
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin
Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals.

Teratogenicity
Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: saflufenacil
Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Other Information
Misuse can be harmful to health.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:
Very toxic to aquatic life with long lasting effects.
The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

Information on: Trifludimoxazin
LC50 (96 h) > 1.76 mg/l, Oncorhynchus mykiss
LC50 (96 h) > 1.68 mg/l, Cyprinus carpio

Information on: saflufenacil
LC50 (96 h) > 96.8 mg/l, Pimephales promelas (OECD Guideline 203, static)

Aquatic invertebrates

Information on: Trifludimoxazin
EC50 (48 h) > 1.95 mg/l, Daphnia magna
LC50 (48 h) 0.574 mg/l, Americamysis bahia

Information on: saflufenacil
EC50 (48 h) > 100 mg/l, Daphnia magna

Aquatic plants

Information on: Trifludimoxazin
EC50 (72 h) 0.000821 mg/l (growth rate), Pseudokirchneriella subcapitata
EC10 (72 h) 0.000486 mg/l (growth rate), Pseudokirchneriella subcapitata
EC50 (72 h) 0.000460 mg/l (growth rate), Navicula pelliculosa
EC10 (72 h) 0.000225 mg/l (growth rate), Navicula pelliculosa

Information on: saflufenacil
EC50 (96 h) 0.113 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
EC10 (96 h) 0.041 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)
EC50 (7 d) 0.1436 mg/l, Lemna gibba (OECD Guideline 221)
No observed effect concentration (7 d) 0.0101 mg/l, Lemna gibba (OECD Guideline 221)

Chronic toxicity to fish

Information on: Trifludimoxazin
No observed effect concentration (34 d) 0.0027 mg/l, Cyprinodon variegatus

Information on: saflufenacil
No observed effect concentration (33 d) >= 10 mg/l, Pimephales promelas
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Chronic toxicity to aquatic invertebrates

Information on: Trifludimoxazin
No observed effect concentration (21 d) 0.0106 mg/l, Daphnia magna

Information on: saflufenacil
No observed effect concentration (21 d) 2.5 mg/l, Daphnia magna

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Persistence and degradability

Assessment biodegradation and elimination (H2O)
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment biodegradation and elimination (H2O)

Information on: Trifludimoxazin

Not readily biodegradable (by OECD criteria).

Information on: saflufenacil

Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Assessment bioaccumulation potential
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: saflufenacil

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential

Information on: Trifludimoxazin

Bioconcentration factor: 81.6

Mobility in soil

Assessment transport between environmental compartments
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Information on: saflufenacil

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:
Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:
Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Marine pollutant:	YES
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains SAFLUFENACIL, TRIFLUDIMOXAZINE)

Air transport
IATA/ICAO

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains SAFLUFENACIL, TRIFLUDIMOXAZINE)

Further information
Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Federal Regulations

Registration status:
Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK	CAS Number	Chemical name
NJ	57-55-6	Propylene glycol
PA	57-55-6	Propylene glycol

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Labeling requirements under FIFRA

This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.
CAUTION:
HARMFUL IF SWALLOWED.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

16. Other Information

SDS Prepared by:
BASF Agricultural Solutions US NA Product Regulations
SDS Prepared on: 2025/12/18

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Date / Revised: 2025/12/18 Version: 5.1
Date / Previous version: 2025/12/16 Previous version: 5.0

END OF DATA SHEET

Voraxor™

Trifludimoxazin	Group	14	Herbicide
Saflufenacil	Group	14	Herbicide

Herbicide

For use in corn, legume vegetables, small grains, sorghum, soybean, and in postharvest and fallow
Powered by Tirexor™
Active Ingredients:

trifludimoxazin: 1,5-dimethyl-6-thioxo-3-[2,2,7-trifluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro-2H-1,4-benzoxazin-6-yl]-1,3,5-triazinane-2,4-dione.	10.76%
saflufenacil: N'-[2-chloro-4-fluoro-5-(3-methyl-2,6-dioxo-4-(trifluoromethyl)-3, 6-dihydro-1(2H)-pyrimidinyl)benzoyl]-N-isopropyl-N-methylsulfamide.	21.51%
Other Ingredients:.	67.73%
Total:	100.00%

Contains 1.043 pounds active ingredient trifludimoxazin and 2.086 pounds active ingredient saflufenacil per gallon product formulated as a water-based suspension concentrate

EPA Reg. No. 7969-495 **EPA Est. No. 241-PR-002**

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.)

See full label for complete **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Net Contents: 1 Gallon

4081168027 NVA 2026-05-0634-0558

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713

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FIRST AID	
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • **DO NOT** give anything to an unconscious person.
If in eyes	• Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes. • Call a poison control center for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth to mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling the poison control center at 1-800-222-1222 or doctor or going for treatment. You may also contact BASF Agricultural Solutions US LLC (hereafter "BASF") for emergency medical treatment information at 1-800-832-HELP (4357).	

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION. Harmful if swallowed. Remove and wash contaminated clothing before reuse. 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
- Shoes plus socks
- Chemical-resistant gloves

User Safety Requirements

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

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 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for **applicators and other handlers** and have such PPE immediately available for use in an emergency, including a spill or equipment breakdown.

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

For terrestrial uses, **DO NOT** apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

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

Surface Water Advisory. Trifludimoxazin and saflufenacil may impact surface water due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several weeks after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of this chemical from runoff water and sediment. Runoff of this product will be reduced by avoiding application when rainfall is forecast to occur within 48 hours.

Nontarget Organism Advisory: This product is toxic to plants and may adversely impact the forage and habitat of nontarget organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of nontarget organisms by minimizing spray drift.

Pollinator Advisory: This product is potentially toxic to bee larvae. Avoid application of this product to crops in bloom or if bees are actively collecting pollen or nectar from the treatment area.

Reporting Ecological Incidents: For guidance on reporting ecological incidents, see EPA's Pesticide Incident Reporting website: https://www.epa.gov/pesticide-incidents.

Directions For Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at time of herbicide application.

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.

Observe all precautions and restrictions in this label and the labels of products used in combination with **Voraxor™ herbicide**. The use of **Voraxor** not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, precautions, and **Conditions of Sale and Warranty** are to be followed.

BASF does not advise or authorize the use of this product in manufacturing, processing, or preparing custom blends with other products for application in crops.

Endangered and Threatened Species Protection Requirements

Before using this product, you must obtain any applicable Endangered Species Protection Bulletins ('Bulletins') within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s).

For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.

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**.

EXCEPTION: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, including plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves
- Shoes plus socks

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

DO NOT use or store near heat or open flame. Store in original container in a well-ventilated area separately from fertilizer, feed, or foodstuffs. Avoid cross-contamination with other pesticides.

Pesticide Disposal

Wastes resulting from 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 the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling

Nonrefillable Plastic Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

(continued)

STORAGE AND DISPOSAL

(continued)

Container Handling *(continued)*

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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 1/4 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.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace 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.

(continued)

STORAGE AND DISPOSAL

(continued)

Container Handling *(continued)*

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Triple rinse as follows: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

(continued)

STORAGE AND DISPOSAL

(continued)

Container Handling *(continued)*

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage including cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

In Case of Emergency

In case of large-scale spill of this product, call:

- CHEMTREC 1-800-424-9300
- BASF 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF 1-800-832-HELP (4357)

Steps to take if material is released or spilled:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

Product Information

Voraxor™ herbicide provides contact burndown control of broadleaf and grass weeds (refer to **Table 1** for list). It can be used in select field and row crops: chickpea (garbanzo beans), corn (field, seed, silage, sweet, and popcorn), field pea, lentil, small grains, sorghum (grain), soybean, fallow, and postharvest croplands. Refer to **Crop-specific Information** section for specific use directions.

Make burndown applications of **Voraxor** when broadleaf and grass weeds are small and actively growing. An adjuvant is required with **Voraxor** for optimum burndown activity (refer to **Additives** section for details). Burndown activity may be slowed or reduced under cloudy and/or foggy or cooler weather conditions, or when weeds are growing in drought or other stress conditions. When targeting dense weed populations and/or larger broadleaf and grass weeds, use a higher application rate within an application rate range and/or higher spray volumes. Angling nozzles forward (to 45 degrees) may improve penetration of denser weed canopies.

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Voraxor™ herbicide

Common Name	Scientific Name	Voraxor Use Rate (fl ozs/A)		
		0.7	**1.0**	**1.4**
Broadleaf Weeds		**Maximum Weed Height or Diameter**		
		(4 inches)	(4 to 6 inches)	(4 to 6 inches)
Amaranth, Palmer[2]	*Amaranthus palmeri*	C (3")	C	C
Bedstraw, catchweed	*Galium aparine*		C	C
Beggarticks, hairy	*Bidens pilosa*			C
Beggarweed, Florida	*Desmodium tortuosum*			C
Bindweed, field	*Convolvulus arvensis*			S[1]
Buckwheat, wild	*Polygonum convolvulus*		C	C
Canola, volunteer (rapeseed)	*Brassica* spp.			C
Carpetweed	*Mollugo verticillata*		C	C
Chickweed, common	*Stellaria media*	C	C	C
Chickweed, field	*Cerastium arvense*			C
Chickweed, mouseear	*Cerastium vulgatum*	C	C	C
Cocklebur, common	*Xanthium strumarium*			C
Cotton, volunteer	*Gossypium hirsutum*			C
Cowcockle	*Vaccaria pyramidata*			C
Cudweed, purple	*Gnaphalium purpureum*	C	C	C
Dandelion, common	*Taraxacum officinale*		S[1]	S
Eveningprimrose, cutleaf	*Oenothera laciniata*		C	C
Falseflax, smallseed	*Camelina microcarpa*			C
Fiddleneck	*Amsinckia menziesii*			C

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Voraxor™ herbicide *(continued)*

Common Name	Scientific Name	Voraxor Use Rate (fl ozs/A)		
		0.7	**1.0**	**1.4**
Broadleaf Weeds *(continued)*		**Maximum Weed Height or Diameter**		
		(4 inches)	(4 to 6 inches)	(4 to 6 inches)
Field pansy	*Viola bicolor Pursh*		C	C
Filaree, redstem	*Erodium cicutarium*			S
Fleabane, hairy	*Conyza bonariensis*	C	C	C
Flixweed	*Descurainia sophia*			C
Geranium/Cranesbill, Carolina	*Geranium carolinianum*		C	C
Groundcherry, cutleaf	*Physalis angulata*			C
Groundsel, cressleaf	*Senecio glabellus*	C	C	C
Groundsel, common	*Senecio vulgaris*			C
Hawksbeard, narrowleaf	*Crepis tectorum*			C
Hemlock, poison	*Conium maculatum*			C
Henbit	*Lamium amplexicaule*	C	C	C
Horseweed (marestail)	*Conyza canadensis*	C (3")	C	C
Jointvetch, Indian	*Aeschynomene indica*		C	C
Knotweed, prostrate	*Polygonum aviculare*			C
Kochia	*Kochia scoparia*	C 1-inch to 3-inch Suppression of button/puffball stage at < 1-inch tall	C 1-inch to 3-inch Suppression of button/puffball stage at < 1-inch tall	C

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Voraxor™ herbicide *(continued)*

Common Name	Scientific Name	Voraxor Use Rate (fl ozs/A)		
		0.7	**1.0**	**1.4**
Broadleaf Weeds *(continued)*		**Maximum Weed Height or Diameter**		
		(4 inches)	(4 to 6 inches)	(4 to 6 inches)
Ladysthumb	*Polygonum persicaria*			C
Lambsquarters, common	*Chenopodium album*	C	C	C
Lambsquarters, narrowleaf	*Chenopodium pratericola*			C
Lesser swinecress	*Lepidium didymum*	C	C	C
Lettuce, prickly	*Lactuca serriola*			C
Mallow, common	*Malva neglecta*			C
Mallow, little (Cheeseweed)	*Malva parviflora*			C
Mallow, Venice	*Hibiscus trionum*			C
Marestail (Horseweed)	*Conyza canadensis*	C (3")	C	C
Marshelder	*Iva xanthifolia*			C
Morningglory, entireleaf	*Ipomoea hederacea* var. *integriuscula*			C
Morningglory, ivyleaf	*Ipomoea hederacea*	C	C	C
Morningglory, palmleaf	*Ipomoea wrightii*			C
Morningglory, pitted	*Ipomoea lacunosa*	C	C	C
Morningglory, tall	*Ipomoea purpurea*			C
Mustard, black	*Brassica nigra*			C
Mustard, tumble	*Sisymbrium altissimum*			C
Mustard, wild	*Sinapis arvensis*		C	C
Needles, Spanish	*Bidens pilosa*			C

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Voraxor™ herbicide *(continued)*

Common Name	Scientific Name	Voraxor Use Rate (fl ozs/A)		
		0.7	**1.0**	**1.4**
Broadleaf Weeds *(continued)*		**Maximum Weed Height or Diameter**		
		(4 inches)	(4 to 6 inches)	(4 to 6 inches)
Nettle, burning	*Urtica urens*			C
Nightshade, black	*Solanum, nigrum*			C
Nightshade, cutleaf	*Solanum, triflorum*			C
Nightshade, Eastern black	*Solanum, ptycanthum*			C
Nightshade, hairy	*Solanum, saccharoides*			C
Parthenium	*Parthenium hysterophorus*			C
Pennycress, field	*Thlaspi arvense*	C	C	C
Pigweed, prostrate	*Amaranthus blitoides*			C
Pigweed, redroot	*Amaranthus retroflexus*	C	C	C
Pigweed, smooth	*Amaranthus hybridus*			C
Plantain, buckhorn	*Plantago lanceolata L.*			C
Puncturevine	*Tribulus terrestris*			C
Purple Deadnettle	*Lamium purpureum*	C	C	C
Purslane, common	*Portulaca oleracea*	C	C	C
Pusley, Florida	*Richardia scabra*			C
Radish, wild	*Raphanus raphanistrum*		C	C
Ragweed, common[2]	*Ambrosia artemisiifolia*		C	C
Ragweed, giant	*Ambrosia trifida*		C	C
Rocket, London	*Sisymbrium irio*			C
Sesbania, hemp	*Sesbania exaltata*	C	C	C

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Voraxor™ herbicide *(continued)*

Common Name	Scientific Name	Voraxor Use Rate (fl ozs/A)		
		0.7	**1.0**	**1.4**
Broadleaf Weeds *(continued)*		**Maximum Weed Height or Diameter**		
		(4 inches)	(4 to 6 inches)	(4 to 6 inches)
Shepherd's-purse	*Capsella bursa-pastoris*	C	C	C
Sida, prickly	*Sida spinosa*		C	C
Smartweed, Pennsylvania	*Polygonum pensylvanicum*			C
Sowthistle, annual	*Sonchus oleraceus*			C
Sowthistle, spiny	*Sonchus asper*			C
Speedwell, Bird's-eye	*Veronica persica*	C	C	C
Speedwell, Field	*Veronica agrestis L.*	C	C	C
Speedwell, Persian	*Veronica persica Poir.*	C	C	C
Speedwell, purslane	*Veronica peregrina L.*	C	C	C
Spurge, leafy	*Euphorbia esula*	C	C	C
Sunflower, common	*Helianthus annuus*		C	C
Swinecress, lesser	*Coronopus didymus*	C	C	C
Tansymustard, pinnate	*Descurainia pinnata*			C
Texasweed	*Caperonia palustris*			C
Thistle, Canada	*Cirsium arvense*			C
Thistle, Russian	*Salsola kali*	S	C	C
Velvetleaf	*Abutilon theophrasti*	C	C	C
Vetch, common	*Vicia sativa*			C
Waterhemp[2]	*Amaranthus tuberculatus*	C (3")	C	C

(continued)

Table 1. Broadleaf and Grass Weeds Controlled with a Burndown Application of Voraxor™ herbicide *(continued)*

Common Name	Scientific Name	Voraxor Use Rate (fl ozs/A)		
		0.7	**1.0**	**1.4**
Broadleaf Weeds *(continued)*		**Maximum Weed Height or Diameter**		
		(4 inches)	(4 to 6 inches)	(4 to 6 inches)
Willowweed	*Epilobium adenocaulon*			C
Woolly Croton	*Croton capitatus*			C
• Additional broadleaf weeds controlled (or suppressed) at rate of 2.75 fl ozs/A: curly dock *(Rumex crispus)*, panicle willowweed *(Epilobium paniculatum)*, white clover *(Trifolium repens)*				
Grass Weeds and Sedges		**Maximum Weed Size** (2 to 3 leaves)		
Barnyardgrass	*Echinochloa crus-galli*			C
Bluegrass, annual	*Poa annua*	S	S	C
Crabgrass, large	*Digitaria sanguinalis*			S
Foxtail, giant	*Setaria faberi*			C
Goosegrass	*Eleusine indica*			S
Nutsedge, annual	*Cyperus esculentus*		S	S
Nutsedge, yellow	*Cyperus compressus*		S	S
Ryegrass, Italian	*Lolium multiflorum*			S
Signalgrass, broadleaf	*Brachiaria platyphylla*			S

C = Control, S = Suppression

[1] Control of seedling stage and suppression of perennial growth stage.

[2] Populations of noted weeds exist that are known to be resistant to burndown applications of **Group 14** herbicides and may not be controlled by herbicides like **Voraxor**. See the **Herbicide Resistance Management** section for practices to manage and minimize the impact of resistant weeds (e.g. tank mixes or alternation with other herbicide modes of action, crop rotation, and mechanical control).

Mode of Action

Saflufenacil and trifludimoxazin, the active ingredients in **Voraxor™ herbicide**, are potent inhibitors of protoporphyrinogen-oxidase belonging to herbicide mode of action **Group 14**. **Voraxor** is rapidly absorbed by roots and foliage. Following inhibition of protoporphyrinogen-oxidase, plant death is the result of membrane damage. Under active growing conditions, susceptible emerged weeds usually develop chlorotic and necrotic injury symptoms within hours and die within a few days.

Herbicide Resistance Management

Any weed population may contain or develop plants naturally resistant to **Voraxor** and other **Group 14** herbicides. Weed species with resistance to **Group 14** may dominate the weed population if **Group 14** herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Voraxor** or other **Group 14** herbicides. Proper stewardship practices should be employed to ensure the long-term effectiveness of **Voraxor** including mixture or sequential use of other effective herbicides to mitigate resistance development with **Voraxor**.

To delay herbicide resistance, consider:

- Resistance management should be part of a diversified weed control strategy that integrates chemical, cultural, and mechanical (tillage) control tactics. Cultural control tactics include crop rotation, proper fertilizer placement, and optimum seeding rate/row spacing. Start with clean fields using tillage or an effective burndown herbicide program. These practices encourage crop growth and improve competitiveness against weeds.
- Clean equipment before moving to a different field to avoid spread of resistant weeds.
- Scout fields prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.
- Always follow labeled application rate and weed growth stage specifications.
- Use sequential programs with preemergence herbicides that provide soil residual control of weeds to reduce early season weed competition and allow for timely in-crop postemergence herbicide applications.
- **DO NOT** rely on a single herbicide site of action for weed control during the growing season.
- Avoid application of herbicides with the same site of action more than twice a season.
- Use tank mixes or premixes with other herbicides possessing different sites of action that are also effective on the target weeds.
- Scout fields after herbicide application to identify areas where weed control was ineffective.
- Control weed escapes with herbicides possessing a different site of action or use a mechanical control measure. Weed escapes should not be allowed to reproduce by seed or to proliferate vegetatively.
- If a weed 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.

- Contact your **Voraxor™ herbicide** supplier and/or your local BASF representative to report weed escapes.
- Consult your local BASF representative, local or state cooperative extension service, professional consultants or crop advisors, or other qualified authority to determine appropriate actions if you suspect resistant weeds.
- Suspected herbicide-resistant weeds may be identified by these indicators:

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 noncontrolled plants of a particular weed species; and
3. Surviving plants mixed with controlled individuals of the same species.

Crop Tolerance

Crops listed on this label are tolerant to **Voraxor** when applied according to label directions and under normal environmental conditions. Crop injury may occur under stressful growing conditions (e.g. low soil fertility, seedling disease, extreme hot or cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought).

Severe crop injury will result if **Voraxor** is applied postemergence (over the top) to any crop.

Application Instructions

Voraxor may only be applied before crop emergence.

Application Rates

Application rates of **Voraxor** vary depending on soil texture and organic matter. Refer to **Table 2** for soil texture groups used in this label.

Table 2. Soil Texture Groups

Coarse	Medium	Fine
Sand Loamy sand Sandy loam	Silt Silt loam Loam Sandy clay loam	Sandy clay Silty clay Silty clay loam Clay loam Clay
Low Organic Matter – soils (regardless of texture) with ≤ 2% organic matter		

Refer to the **Crop-specific Information** section for specific application rate, timing, and restrictions and precautions by crop and use pattern.

Table 3. Use Rate Equivalency

Amount of Voraxor (fl ozs/A)	**Amount of Saflufenacil** (lb ai/A)	**Amount of Trifludimoxazin** (lb ai/A)
0.7	0.011	0.006
1.0	0.016	0.008
1.4	0.023	0.011
2.75	0.045	0.022

Application Methods and Equipment

Voraxor™ herbicide may be applied by ground spray or aerial spray. Thorough spray coverage is required for optimum broadleaf and grass weed control and can be improved with proper adjuvant, nozzle, and spray volume selection.

Use and configure application equipment for adequate spray volume, accurate and uniform distribution of spray droplets over the treated area, and to avoid spray drift to nontarget areas. Adjust equipment to maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above use rates specified in this label.

Voraxor may be applied using water or sprayable fluid nitrogen fertilizer solutions as the spray carrier.

Aerial Spray Carrier Volume. Use 15 or more gallons of water per acre for helicopter applications. Use 3 or more gallons of water per acre for fixed-wing aircraft applications.

Ground Spray Carrier Volume. Use 15 or more gallons of water per treated acre or 20 or more gallons of sprayable fluid nitrogen fertilizer per treated acre. Thorough spray coverage is required for control of emerged broadleaf and grass weeds. High populations and/or variations in size can prevent thorough spray coverage. Controlling fall-germinated weeds in the spring (e.g. horseweed/marestail) also requires thorough spray coverage. Use higher spray volumes (e.g. 15 to 20 gallons of water per acre) in these situations to increase spray coverage and optimize burndown activity.

Aerial Spray Nozzle Selection. Applicators must select nozzles and pressure that deliver very coarse or coarser droplets as indicated in nozzle manufacturer's catalogues and in accordance with American Society of Agricultural & Biological Engineers Standard 641 (ASABE §641).

Ground Spray Nozzle Selection. Applicators must select nozzles and pressure that deliver coarse to very coarse droplets as indicated in nozzle manufacturer's catalogues and in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE §572). Nozzles that deliver coarse or very coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of target (i.e., weeds).

Spray Drift Retardants. Addition of some spray drift retardants (drift reducing agents, e.g. DRA) can significantly increase the droplet size but reduce spray coverage and efficacy. If a spray drift retardant is used, ensure that it is compatible for use with **Voraxor** and spray equipment being used and the desired level of weed control is maintained.

Cleaning Spray Equipment

Before applying **Voraxor** all application equipment must be thoroughly cleaned. All spray equipment, hoses, and nozzles must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply **Voraxor**.

Spray equipment used to apply **Voraxor™ herbicide** should not be used to apply other materials to any crop unless the proper cleanout procedures are followed. Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions, followed by triple rinsing the equipment after applying this product.

Mitigating Off-Target Movement

MANDATORY SPRAY DRIFT MANAGEMENT

All Applications – Aerial and Ground Boom

- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- Wind speed and direction must be measured on location using a windsock, an anemometer (including systems to measure wind speed or velocity on an aircraft or ground application equipment), or an aircraft smoke system.
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes) must register between 3 and 15 miles per hour.
- **DO NOT** apply during temperature inversions.

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MANDATORY SPRAY DRIFT MANAGEMENT *(continued)*

Aerial Applications – Fixed-wing Aircraft and Helicopter

- When applying via aerial application equipment, the spray boom must be mounted on the aircraft to minimize drift caused by wing tip or rotor blade vortices.
- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is required for pilot safety.
- The boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters. But when the wind speed is between 11 to 15 miles per hour, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters.
- Applicators must use a minimum of 1/2 swath displacement upwind at the downwind edge of the field. But when the wind speed is between 11 to 15 miles per hour, applicators must use a minimum of 3/4 swath displacement upwind at the downwind edge of the field.

(continued)

MANDATORY SPRAY DRIFT MANAGEMENT *(continued)*

Ground Boom Applications

- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a nozzle height of 24 inches above the spray target (i.e., top of weed canopy). Set boom to lowest effective height over the target pest based on equipment manufacturer's directions.
- Applicators should select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure, but **DO NOT** exceed a ground speed of 15 miles per hour.

Mandatory Spray Drift Mitigations

Ecological spray drift buffers are required for this product for aerial and ground boom applications to field crops. Access EPA's **Mitigation Menu** website (www.epa.gov/pesticides/mitigation-menu) for the full list of parameters to evaluate whether your field is subject to the required spray drift buffer.

Applicators must access and search **Bulletins Live! Two** (BLT) at https://www.epa.gov/pesticides/bulletins within six months prior to or on the day of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA). If you are located inside a PULA, follow the instructions in the BLT bulletin. If the application site falls outside of a PULA, follow the instructions in the "Outside a PULA" section below. Additional restrictions may be present in bulletins—always follow the most restrictive bulletin instructions.

Outside a PULA. A minimum down-wind spray drift buffer must be maintained between the application area and any unmanaged areas for applications to field crops. Unmanaged areas are defined in comparison to managed areas – anything that is not a managed area is an unmanaged area. Refer to the list of **Managed Areas** in this label.

Mandatory Spray Drift Buffers

For aerial and ground applications, maintain a wind-directional (downwind) buffer distance from the edge of the treated area as follows:

Application Method	Minimum Required Buffer Distance
Aerial	110 feet
Ground	15 feet

Reduction Options for All Ecological Wind-Directional Drift Buffers

The applicator may choose among the ecological drift buffer reduction options on EPA's **Mitigation Menu** website (http://www.epa.gov/pesticides/mitigation-menu) to reduce the wind-directional buffer distance before applying this product. All buffer reduction options selected must align with the minimum droplet size and release height requirements on this label.

Examples of buffer reduction options include: using larger droplets, lowering the boom height, reducing the maximum single application rate, reducing the number of passes across the field, maintaining a windbreak or hedgerow, or using directed sprayers.

The buffer reduction options must be employed in accordance with the instructions and descriptions on EPA's **Mitigation Menu** website. When using more than one option during the application, the percent reduction in the buffer distances may be added together. The maximum buffer reduction that can be achieved by a combination of buffer reduction options is 100% (i.e., no drift buffer).

Additional restrictions may be present in bulletins—always follow the most restrictive bulletin instructions. If you are located in an area where PULAs overlap, follow the most restrictive requirements across all bulletins. When tank mixing, the most restrictive of the products' label or bulletin requirements must be followed (e.g., drift buffers that are not wind-directional, Application Exclusion Zone drift requirements, drift buffers to residences, schools, and parks where people could be present, use prohibitions, timing restrictions, and application method prohibitions).

Managed Areas

Managed areas that can be included as part of wind-directional spray drift buffer footage include the following:

- Agricultural fields, pastures, forage fields, and private rangelands, including untreated portions of the treated field/site;
- Roads, paved or gravel surfaces, mowed grassy/fallowed areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated area;
- Buildings and their perimeters, or other on-farm man-made structures with walls and/or roof;
- Areas present and/or maintained as a runoff/erosion measure as listed on EPA's **Mitigation Menu** website. Examples include vegetative filter strips (VFS), field borders, grassed waterways, vegetated ditches, riparian areas, managed/constructed wetlands, or other areas of intentional habitat improvement;
- Areas present and/or maintained as a drift buffer reduction measure as listed on EPA's **Mitigation Menu** website. Examples include vegetative windbreaks, hedgerows, shelterbelts, riparian areas, private forests, woodlots, and shrublands;
- Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) lands;
- On-site contained irrigation water resources that are not connected to adjacent water bodies, including on-site irrigation canals and ditches, water conveyances, managed irrigation/runoff retention basins, ponds, and tailwater collection ponds.

Managed areas can be included as part of the buffer footage if they are downwind and immediately adjacent/contiguous to the treated field and people are not present in those areas.

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 specified 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' directions for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

Release Height - Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.

Release Height – Aircraft

Higher release heights increase the potential for spray drift.

Hooded (or Shielded) Sprayers

Shielding the boom or individual nozzles can reduce spray drift. Consider using hooded (or shielded) sprayers. Verify that the hoods (or 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 Inversion

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. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Measuring Wind Speed and Wind Direction

- Applicators should check and acquire the predicted wind speed and direction for the application site within 12 hours prior to conducting applications to determine the time periods wind speed is likely to fall outside the applicable thresholds.
- Applicators should reassess wind speed and direction at the application site at least every hour while applications are in progress.
- Measuring wind speed and direction can be done by:

- Relying on equipment on the application equipment that measures wind speed (e.g., aerial or ground equipment).
- Using a tower anemometer with telemetry or handheld anemometer. Users should read user manual on how to calibrate, operate and interpret the output from an anemometer. Ground applicators should stop at least every hour to take a reading with a tower anemometer with telemetry or handheld anemometer. Some anemometers may have software that would allow users to view wind measurements in real time while making an application, and, those cases, applicators would not have to stop to take measurements.
- Using a windsock. Wind can be estimated with a windsock using the strips on a windsock. The applicator should consult the user manual for the windsock on wind speed estimation and direction of wind. Applicators should look at the sock at least every hour to estimate wind speed and direction.
- Using an aircraft smoke system. Laying down several puffs of smoke along different lines using an aircraft smoke system can provide an accurate view of what the wind speed and direction for the application.
- Checking behind the spray rig at least every hour to see if the spray has changed direction from when the application started.

Mandatory Runoff Mitigation

Applicators must access and search **Bulletins Live! Two** (BLT) at https://www.epa.gov/pesticides/bulletins within six months prior to or on the day of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA). If you are located inside a PULA, follow the instructions in the the BLT bulletin. If the application site falls outside of a PULA, follow the instructions in the section below.

The minimum of 6 mitigation points must be achieved for the following agricultural crop use sites: corn, postharvest/fallow, legume vegetables, small grains, sorghum, and soybean.

Step 1. To achieve the mitigation points specified above, visit EPA's **Mitigation Menu** website (http://www.epa.gov/pesticides/mitigation-menu) for a full list of mitigation and mitigation relief options.

Step 2. Determine if you are eligible for mitigation relief. Runoff/erosion mitigation is NOT required if certain field/application parameters are present at the time of application (e.g., subsurface or tile drains with controlled outlet, perimeter berm systems, irrigation tailwater return systems, spot treatment, etc).

Step 3. If the application site does not meet the field/application parameters specified on EPA's **Mitigation Menu** website, choose among the mitigation and/or mitigation relief options on EPA's **Mitigation Menu** website to meet or exceed the required points noted here before applying this product.

Step 4. To achieve mitigation points for the application, the mitigation and mitigation relief measures must be:

- Employed in accordance with the instructions and descriptions on EPA's **Mitigation Menu** website.
- In place during the application unless a different timing (such as before or after application) is specifically provided in the measure's description on EPA's **Mitigation Menu** website. EPA may periodically update the **Mitigation Menu** website, for example, by adding new mitigation measures or updating a mitigation measure description.

Step 5. Additional restrictions may be present in bulletins—always follow the most restrictive bulletin instructions. If you are located in an area where PULAs overlap, follow the most restrictive requirements across all bulletins. When tank mixing, the most restrictive requirements must be followed between the products' labels and bulletins.

Additives

For optimum burndown with **Voraxor™ herbicide**, an adjuvant system must be used that includes the following:

Adjuvant	Rate
methylated seed oil[1] (MSO)	1 gal/100 gals[2] (1% v/v)
PLUS	**PLUS**
ammonium sulfate (AMS) **or** urea ammonium nitrate (UAN)	8.5 to 17 lbs/100 gals (1% to 2% w/v) **or** 1.25 to 2.5 gals/100 gals (1.25% to 2.5% v/v)

[1] MSO-based adjuvant **MUST** contain at least 60% methylated seed oil. Poor performance may occur with adjuvants containing less than 60% methylated seed oil.

[2] **DO NOT** use less than 1 pint/A of MSO with low-volume (less than 12.5 gallons per acre) aerial or ground application.

Use of AMS fertilizer is highly advised when mixing **Voraxor** with glyphosate-based herbicides.

DO NOT use nonionic surfactant (NIS) as a substitute for MSO, or poor performance on broadleaf and/or grass weeds will occur.

When an adjuvant is to be used with this product, BASF recommends the use of a Council of Producers & Distributors of Agrotechnology (CPDA) certified adjuvant.

DO NOT add acidifying agents to the spray tank when applying **Voraxor™ herbicide**.

Tank Mixing Information

It is the pesticide user's responsibility to ensure that all products in the mixtures are registered for the intended use. Read and follow the applicable restrictions and precautions and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Voraxor may be tank mixed or applied sequentially with other herbicide products registered for use in any labeled crop found in this label for a broader spectrum of control of emerged weeds and/or residual weed control. Refer to the tank mix product labels to confirm that the respective tank mix products are registered for use on the labeled crop. Read and follow tank mix product labels for application instructions, use restrictions and precautions, and rotational cropping guidance.

Tank mixes with contact herbicides (e.g. carfentrazone, paraquat) may reduce the burndown activity of **Voraxor**.

When tank mixing, the most restrictive of the products' label or bulletin (BLT) requirements must be followed (e.g., use prohibition, timing restriction, application method restriction, sandy soil application restriction, etc.).

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

1. For 20 gallons per acre spray volume, use 3.3 cups (800 mL) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.
2. Add components in the sequence indicated in **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of label rate per acre.
3. Always cap the jar and invert 10 cycles between component additions.
4. When the components have all been added to the jar, let the solution stand for 15 minutes.
5. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, or fine particles that precipitate to the bottom, or thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

Mixing Order

Maintain agitation throughout mixing and application until spraying is completed.

1. **Water** - Fill tank 1/2 to 3/4 full with clean water and start agitation.
2. **Inductor** - If an inductor is used, rinse it thoroughly after each component has been added.
3. **Products in PVA bags** - Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
4. **Water-soluble additives** (including dry and liquid fertilizers AMS or UAN)
5. **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions, add **Voraxor™ herbicide** now)
6. **Water-soluble products**
7. **Emulsifiable concentrates** (including MSO adjuvants)
8. **Remaining quantity of water**

If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.

Use Restrictions

- **Maximum annual use rate** - Refer to **Crop-specific Information** section for maximum application use rates for each crop use. A cropping season is defined as the period following harvest of the preceding crop through the harvest of the planned or current crop.
- If additional saflufenacil is applied from other product sources, refer to the **Crop-specific Restrictions** section for each crop use for the maximum cumulative amount per year.
- **DO NOT** apply **Voraxor** after crop emergence or severe crop injury will occur.
- **DO NOT** apply **Voraxor** through any type of irrigation system (e.g. chemigation).
- **DO NOT** contaminate water used for irrigation or domestic purposes.
- **DO NOT** feed or allow domestic animals to graze areas or crops not included in the use directions of this label within 365 days of **Voraxor** application.
- **DO NOT** apply during rain.
- **DO NOT** apply this product when soil is saturated or at field capacity, or when a storm event likely to produce runoff from the treated area is expected to occur within 24 hours following application.
- Within 24 hours after application, **DO NOT** irrigate the treatment area to the point of runoff.

- **Voraxor™ herbicide is not for sale, distribution, or use in Alaska, Hawaii, US Territories (including American Samoa, Guam, Puerto Rico, Mariana Islands, US Virgin Islands), and in Nassau and Suffolk counties in New York State.**

Use Precautions

- **Rainfastness** - **Voraxor** is rainfast 1 hour after application. Burndown activity may be reduced if rain or irrigation occurs within 1 hour of application.
- **Emergency Replanting Intervals** - In the event of crop failure (because of environmental factors, including drought, frost, hail, etc.), the following labeled crops may be planted immediately after an application of **Voraxor** according to the rates specified in the **Crop-specific Information** section: Field corn, popcorn, seed corn, processing sweet corn, chickpea, field pea, barley, wheat, grain sorghum and soybean.

Crop Rotation Intervals

Refer to **Table 4** for the proper interval between **Voraxor** application and planting of rotational crops. Determine the rotational crop interval for tank mix products and use the most restrictive interval of all products applied.

Table 4. Rotational Crop Intervals by Voraxor™ herbicide Application Rate

Crop	Voraxor Rate (fl ozs/A)	
	≤ 1.4	2.75
	Rotational Crop Interval (months after application)[1]	
Corn (field, pop, seed, processing sweet)	0	1
Chickpea	0	2
Pea, dry field	0	2
Barley and wheat	0	1
Sorghum (grain)	0	1
Soybean[2]	0 to 1	1 to 1.5
Alfalfa	4	6
Corn, fresh sweet (and sweet seed)	0.5	2
Cotton	4	4
Edible peas	1.5	3
Edible beans	1	2
Lentil	1.5	3
Grass (forage, seed) Establishment	4	4
Peanut	4	5
Rice	4	4
Small grains (other than barley and wheat)	1	1
Sorghum (all other than grain)	1	1
Sugar beet	5	5
Sugarcane	4	4

(continued)

Table 4. Rotational Crop Intervals by Voraxor™ herbicide Application Rate *(continued)*

Crop	Voraxor Rate (fl ozs/A)	
	≤ 1.4	2.75
	Rotational Crop Interval (months after application)[1]	
Sunflower	5	5
Cover crops (winter, spring)[3]	1	2
Other field crops	5	6
Citrus fruit trees	1	1
Nut trees	3	3
Pome fruit trees	3	3
Other fruit trees	4	6
Avocado trees	9	9
Grape	9	9

[1] **DO NOT** include time when the soil is frozen, or months when less than 1 inch of precipitation or irrigation occurred.

[2] The planting interval for these crops and rates are further defined in the respective **Crop-specific Information** section of this label. Use longer interval within listed ranges for indicated crops grown on coarse-texture soils with organic matter less than 2%.

[3] Cover crops (winter, spring) may be planted after application of **Voraxor**, either inter-seeded into the current crop before harvest or after harvest of the current crop. Depending on the sensitivity of the sown cover crop to **Voraxor**, stand establishment may be reduced. If cover crops were sown less than 4 months after **Voraxor** application, **DO NOT** harvest cover crops as a food or feed crop and **DO NOT** allow livestock to graze cover crops.

Crop-specific Information

This section provides use directions for **Voraxor™ herbicide** in specific crops. Read product information, mixing, application, weeds controlled, and adjuvant instructions in preceding sections of the label. Read and follow tank mix product labels for restrictions, precautions, instructions, and rotational crop restrictions.

Depending on specific crop application directions, **Voraxor** may be applied for burndown control of emerged broadleaf and grass weeds (refer to **Table 1** for list of weeds controlled) before crop planting (preplant and/or preseed) or after planting but before crop emergence (preemergence).

For all crop-specific uses in this section, refer to **Table 4** for crop rotation intervals.

Thorough spray coverage is required for control of emerged broadleaf and grass weeds. High populations and/or variations in size can prevent adequate spray coverage. Controlling fall-germinated weeds in the spring (e.g. horseweed/marestail) also requires thorough spray coverage. Use higher spray volumes (e.g. 15 to 20 gallons of water per acre) in these situations to increase spray coverage and optimize burndown activity.

Field Corn (grain, silage), Popcorn, Seed Corn, and Sweet Corn

Voraxor may be applied prior to corn emergence for burndown control of broadleaf and grass weeds (refer to **Table 1** for list of weeds controlled). Corn in this label refers to field corn (grown for grain or silage), popcorn, seed corn, and sweet corn (processing varieties only, not including sweet corn grown for seed or fresh market varieties). Before applying **Voraxor** to seed corn, processing sweet corn, or popcorn, verify the selectivity of **Voraxor** on your inbred line or hybrid with your local seed company (supplier) to help avoid potential injury to sensitive inbreds or hybrids.

Application Rate, Method, and Timing

Apply **Voraxor** as a broadcast spray for burndown control of emerged broadleaf and grass weeds as preplant surface or preemergence application. An adjuvant system (refer to the **Additives** section for details) is required for optimum burndown activity.

Voraxor may only be applied in a single application.

Fall Application

Apply **Voraxor** at 1.4 fl ozs/A for burndown after the prior crop is harvested. Application must be made before first killing frost. Fall application can be made to all soil types.

Early Preplant Surface Application (greater than 14 days before planting)

Apply **Voraxor™ herbicide** at 1.0 to 1.4 fl ozs/A. Early preplant surface applications are not advised: on coarse soils, in areas where average annual rainfall (or rainfall plus irrigation) typically exceeds 40 inches, or for popcorn or processing sweet corn. Cultivation or a labeled postemergence herbicide application may still be required under certain conditions for complete weed control.

Preplant Surface Application

Apply **Voraxor** within 14 days of planting at the rates provided in **Table 5**.

Preemergence Surface Application

Apply **Voraxor** at the rates provided in **Table 5** after planting and before crop emergence. **Voraxor** must be applied before crop emergence or injury will occur.

Table 5. Preplant Surface and Premergence Surface Application Rates of Voraxor in Corn

Soil Texture[1]	**Rate by Soil Texture** (fl ozs/A)
Low Organic soils	1.0
Coarse	
Medium	1.0 to 1.4
Fine	

[1] Refer to **Table 2** for definition of soil texture groups.

Crop-specific Restrictions

- **DO NOT** apply **Voraxor** after corn emergence or severe crop injury will occur.
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) in a single application in corn.
- Maximum number of applications per year: 1
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) per year in corn.
- **DO NOT** apply **Voraxor** where an at-planting application of an organophosphate (OP) or carbamate insecticide(s) is planned and/or has occurred because severe injury may result.

  EXCEPTION: Voraxor may be applied when **Aztec® 2.1% granular insecticide**, **Aztec® 4.67 G granular insecticide**, or **SmartChoice™ 5G granular insecticide** is applied at planting as a band, T-band, or in-furrow. **Voraxor** may be applied with all other classes of at-planting insecticides including neonicotinoid and pyrethroid.
- If additional saflufenacil is applied from other product sources, **DO NOT** apply more than the following maximum cumulative amount of saflufenacil per year in corn: 0.134 lb ai/A.

- There is no required (preharvest) interval between a preplant surface or preemergence application of **Voraxor™ herbicide** and the harvest of field corn grain, popcorn, seed corn and sweet corn ears.
- Corn forage and silage must not be harvested, fed, or grazed sooner than 80 days after application. Sweet corn cannery waste may be fed to livestock after harvest.

Crop-specific Precautions

- **Voraxor** use may result in delayed corn emergence and stunting under certain environmental conditions including cool temperatures, excessive rainfall/irrigation, and/or persistent wet soil conditions occurring after application.
- Ensure the corn seed row is closed. Soil conditions that cause poor seed furrow closure and coverage may result in delayed corn emergence or stunting.
- **Voraxor** applied to processing sweet corn planted at depth of 1/2 inch or less may result in crop injury.

Fallow and Postharvest

Voraxor may be applied for burndown control of broadleaf and grass weeds (refer to **Table 1** for list of weeds controlled) following crop harvest and/or at any time of the year during a fallow period in all labeled crops (corn, legume vegetables, small grains, sorghum, soybean), and canola, cotton, rice, sugar beet, and sunflower. **DO NOT** apply **Voraxor** after harvest of any other crop or in fallow period preceding any other crop.

Application Rate, Method, and Timing

Apply **Voraxor** at 1.4 to 2.75 fl ozs/A as a broadcast burndown spray targeting emerged weeds. An adjuvant system (refer to the **Additives** section for details) is required for optimum burndown activity. For best product performance, apply when broadleaf and grass weeds are small and actively growing. Thorough coverage of existing weeds is essential and higher spray volumes may be needed for best performance.

Voraxor may only be applied in a single application.

Use-specific Restrictions

- **DO NOT** apply more than 2.75 fl ozs/A of **Voraxor** (0.045 lb ai/A saflufenacil + 0.022 lb ai/A trifludimoxazin) in a single application.
- Maximum number of applications per year: 1
- **DO NOT** apply more than 2.75 fl ozs/A of **Voraxor** (0.045 lb ai/A saflufenacil + 0.022 lb ai/A trifludimoxazin) per year in postharvest and fallow.
- Specific rotational crop intervals must be observed between an application of **Voraxor** and planting of the following crop (see **Table 4** for crop rotation intervals).

Legume Vegetables [chickpea, field pea (dry), and lentil]

Voraxor™ herbicide may be applied prior to legume vegetable emergence of crops specified in this section for burndown control of broadleaf and grass weeds (refer to **Table 1** for list of weeds controlled). Before applying **Voraxor** to any of the specified legume crops, verify the selectivity of **Voraxor** on your variety with your seed company (supplier) to help avoid potential injury to sensitive varieties.

Application Method, Rate, and Timing

Apply **Voraxor** as a broadcast spray for burndown control of emerged broadleaf and grass weeds as preplant surface or preemergence application. See the specific application rates and timings as they vary by legume crop. With burndown application, an adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity.

Chickpea (garbanzo bean)

Voraxor is for use in all types of chickpeas.

Voraxor may only be applied in a single application.

Apply **Voraxor** early preplant through preemergence at 0.7 to 1.4 fl ozs/A before crop emergence.

Field Peas

Voraxor is for use **ONLY** on dry field peas including Austrian winter peas.

Voraxor may only be applied in a single application.

Apply **Voraxor** early preplant through preemergence at 0.7 to 1.4 fl ozs/A before crop emergence.

Lentils

Voraxor may be applied to green-type and red-type lentils. **DO NOT** apply **Voraxor** to Spanish brown lentils.

Voraxor may only be applied in a single application.

Apply **Voraxor** early preplant through preemergence at 0.7 fl oz/A before crop emergence. Higher use rates must be avoided or crop injury may result.

Use Advisory for Lentils: Rainfall shortly after product application can result in slight injury to the crop. Lentils will be more susceptible to injury on course texture and low organic matter soils. Injury will usually appear as leaf tissue necrosis on the outer edges of the leaves. Lentils will grow out of injury symptoms, and yield will not be impacted at labeled rates. The addition of other soil applied herbicides may increase the sensitivity of lentils to **Voraxor** and injury may result.

Crop-specific Restrictions for all Legume Vegetables

- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor™ herbicide** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) in a single application.
- Maximum number of applications per year: 1
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) per year in legume vegetables.
- **DO NOT** apply **Voraxor** if cold and/or wet conditions are present or predicted to occur within 1 week of application.
- **DO NOT** apply when legumes have reached the cracking stage or after emergence or severe crop injury will occur.
- **DO NOT** apply **Voraxor** with other products containing **Group 14** herbicides (including sulfentrazone or flumioxazin) as a tank mix partner or sequential application within 30 days of planting because crop injury may result.
- If additional saflufenacil is applied from other product sources, **DO NOT** apply more than the following maximum cumulative amount of saflufenacil per year in legume vegetables: 0.089 lb ai/A.
- There is no required (preharvest) interval between an application of **Voraxor** and the harvest of mature legume pods or seeds.
- Legume forage must not be fed or grazed sooner than 65 days after application.

Crop-specific Precautions

- Plant legumes at least 1/2 inch deep to reduce risk of crop injury from **Voraxor** application.
- Ensure the seed row is closed. Soil conditions that cause poor seed furrow closure and coverage may result in delayed crop emergence or stunting.
- Use of **Voraxor** may result in delayed crop emergence and stunting under certain environmental conditions including cool temperatures, excessive rainfall/irrigation, and/or persistent wet soil conditions occurring after application.

Small Grains (barley and wheat)

Voraxor may be applied prior to small grain emergence for burndown control of broadleaf and grass weeds (refer to **Table 1** for list of weeds controlled). Small grains in this label refers to wheat (including durum, spring, and winter) and barley. Before applying **Voraxor** to small grains, verify the selectivity of **Voraxor** on your variety with your seed company (supplier) to help avoid potential injury to sensitive varieties.

Application Rate, Method, and Timing

Voraxor™ herbicide may only be applied in a single application.

Apply **Voraxor** as a broadcast spray for burndown control of emerged broadleaf and grass weeds as preplant surface or preemergence application. An adjuvant system (refer to the **Additives** section for details) is required for optimum burndown activity.

Apply **Voraxor** early preplant through preemergence at the rates provided in **Table 6**.

Table 6. Application Rates of Voraxor in Small Grains

Soil Texture[1]	Rate by Crop and Soil Texture (fl ozs/A)	
	Winter Wheat	**Spring Wheat, Durum Wheat, Barley**
Low Organic soils	1.0	1.0 to 1.4
Coarse		
Medium	1.0 to 1.4	
Fine		

[1] Refer to **Table 2** for definition of soil texture groups.

Crop-specific Restrictions

- **DO NOT** apply after small grain emergence or crop injury will occur.
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) in a single application in small grains.
- Maximum number of applications per year: 1
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) per year in small grains.
- If additional saflufenacil is applied from other product sources, **DO NOT** apply more than the following maximum cumulative amount of saflufenacil per year in small grains: 0.134 lb ai/A.
- Small grain forage and hay must not be fed or grazed sooner than 30 days after application.

Crop-specific Precautions

- Ensure the seed row is sufficiently covered with soil to avoid washing and concentration of the herbicide in the seed zone.

Sorghum (grain)

Voraxor may be applied prior to grain sorghum emergence for burndown control of broadleaf and grass weeds (refer to **Table 1** for list of weeds controlled). Before applying **Voraxor** to grain sorghum, verify with your local seed company (supplier) the selectivity of **Voraxor** on your hybrid or variety to help avoid potential injury to sensitive hybrids or varieties.

Application Rate, Method, and Timing

Apply **Voraxor™ herbicide** as a broadcast spray for burndown control of emerged broadleaf and grass weeds in the fall or in spring as preplant surface or preemergence application. An adjuvant system (refer to the **Additives** section for details) is required for optimum burndown activity.

Voraxor may only be applied in a single application.

Fall Application

Apply **Voraxor** at 1.4 fl ozs/A for burndown after the prior crop is harvested. Application must be made before first killing frost. Fall application can be made to all soil types.

Early Preplant Surface Application (greater than 14 days before planting)

Apply **Voraxor** at 1.0 to 1.4 fl ozs/A. Early preplant surface application is not advised on coarse soils, in areas where average annual rainfall (or rainfall plus irrigation) typically exceeds 40 inches. Cultivation or a labeled postemergence herbicide application may still be required under certain conditions for complete weed control.

Preplant Surface Application

Apply **Voraxor** within 14 days of planting at the rates provided in **Table 7**.

Preemergence Surface Application

Apply **Voraxor** at the rates provided in **Table 7** after planting and before crop emergence. **Voraxor** must be applied before crop emergence or injury will occur.

Table 7. Preplant Surface and Premergence Surface Application Rates of Voraxor in Grain Sorghum

Soil Texture[1]	Rate by Soil Texture (fl ozs/A)
Low Organic soils	1.0
Coarse	
Medium	1.0 to 1.4
Fine	

[1] Refer to **Table 2** for definition of soil texture groups.

Crop-specific Restrictions

- **DO NOT** apply **Voraxor** after grain sorghum emergence or crop injury will occur.
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) in a single application in grain sorghum.
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) per year in sorghum.
- Maximum number of applications per year: 1

- If additional saflufenacil is applied from other product sources, **DO NOT** apply more than the following maximum cumulative amount of saflufenacil per year in grain sorghum: 0.111 lb ai/A.
- **DO NOT** apply **Voraxor™ herbicide** where an at-planting application of an organophosphate (OP) or carbamate insecticide(s) is planned and/or has occurred because severe injury may result.

  EXCEPTION: Voraxor may be applied when **Aztec® 2.1% granular insecticide**, **Aztec® 4.67 G granular insecticide**, or **SmartChoice™ 5G granular insecticide** is applied at planting as a band, T-band, or in-furrow. **Voraxor** may be applied with all other classes of at-planting insecticides including neonicotinoid and pyrethroids.
- Grain sorghum forage must not be harvested, fed, or grazed sooner than 70 days after application.

Crop-specific Precautions

- **Voraxor** use may result in delayed grain sorghum emergence and stunting under certain environmental conditions including cool temperatures, excessive rainfall/irrigation, and/or persistent wet soil conditions occurring after application.
- Ensure the grain sorghum seed row is closed. Soil conditions that cause poor seed furrow closure and coverage may result in delayed sorghum emergence or stunting.

Soybean

Voraxor may be applied prior to soybean emergence in conventional-till, reduced-till, or no-till systems for burndown control of broadleaf and grass weeds (refer to **Table 1** for list of weeds controlled). Before applying **Voraxor** to soybean, verify the selectivity of **Voraxor** on your variety with your seed company (supplier) to help avoid potential injury to sensitive varieties.

Application Rate, Method, and Timing

Apply **Voraxor** as a broadcast spray for burndown control of emerged broadleaf and grass weeds in the fall or in spring as preplant surface or preemergence application. An adjuvant system (refer to the **Additives** section for details) is required for optimum burndown activity.

Sequential applications of **Voraxor** may be made before soybean emergence as part of a split program between fall and spring applications. Fall followed by spring early preplant surface or preemergence applications may be applied as part of a split program with the application timings described in this label. However, the cumulative total rates of the sequential applications must not exceed the maximum rate per year.

Fall Application

Apply **Voraxor** at 1.4 fl ozs/A for burndown after the prior crop is harvested. Application must be made before first killing frost. Fall application can be made to all soil types.

Spring Application

Apply **Voraxor™ herbicide** early preplant through preemergence at 1.0 to 1.4 fl ozs/A before crop emergence.

Soybean Planting Interval

Depending on **Voraxor** use rate, soil texture, and organic matter, an interval between **Voraxor** application and planting may be required (see **Table 8**) or crop injury may occur.

Table 8. Minimum Soybean Planting Intervals

Minimum Preplant Interval (days) **Required between Voraxor Application and Soybean Planting**		
Voraxor Use Rate (fl ozs/A)	**Soil Texture**[1]	
	Coarse Soils with ≤ 2.0% Organic Matter	**All Other Soils**
1.0	14	0
1.4	30	0

[1] Refer to **Table 2** for definition of soil texture groups.

Crop-specific Restrictions

- Prior to soybean emergence, **DO NOT** tank mix or sequentially apply another **Group 14** herbicide with **Voraxor**.
- **DO NOT** apply when soybean has reached the cracking stage or after emergence or severe crop injury will occur.
- **DO NOT** apply more than 1.4 fl ozs/A of **Voraxor** (0.023 lb ai/A saflufenacil + 0.011 lb ai/A trifludimoxazin) in a single application in soybean.
- **DO NOT** apply more than a maximum cumulative amount of 2.75 fl ozs/A of **Voraxor** (0.045 lb ai/A saflufenacil + 0.022 lb ai/A trifludimoxazin) from sequential application per year in soybean.
- Sequential applications must be separated by at least 14 days.
- Maximum number of applications per year: 2
- If additional saflufenacil is applied from other product sources, **DO NOT** apply more than the following maximum cumulative amount of saflufenacil per year in soybean: 0.089 lb ai/A.
- **DO NOT** apply **Voraxor** within 30 days of planting where an at-planting application of an organophosphate or carbamate insecticide(s) is planned and/or has occurred because severe injury may result.
- Always use the most restrictive preplant interval of all inclusive herbicides when applying **Voraxor** as part of a tank mix.
- Soybean forage must not be fed or grazed sooner than 65 days after application.
- There is no required (preharvest) interval between a preplant or preemergence application of **Voraxor** and the harvest of soybean grain.

Crop-specific Precautions

- Use of **Voraxor™ herbicide** may result in delayed crop emergence and stunting under certain environmental conditions including cool temperatures, excessive rainfall/ irrigation, and/or persistent wet soil conditions occurring after application.
- Contact your local retailer or BASF representative before applying **Voraxor** to natto soybeans to verify tolerance and help avoid potential injury.
- Ensure the seed row is sufficiently covered with soil to avoid washing and concentration of the herbicide in the seed zone.
- **Group 14** herbicides labeled for postemergence application in soybean may be used 14 days or more after soybean emergence. Refer to other products' labels for use directions.

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF Agricultural Solutions US LLC ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

(continued)

Conditions of Sale and Warranty

(continued)

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF. 1108

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007969-00495.20260702.**NVA 2026-04-0634-0147**
Based on: NVA 2022-04-0634-0089

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713

We create chemistry

Voraxor™

Trifludimoxazin	Group	14	Herbicide
Saflufenacil	Group	14	Herbicide

Herbicide

For use in corn, legume vegetables, small grains, sorghum, soybean, and in postharvest and fallow
Powered by Tirexor™

Active Ingredients:

trifludimoxazin: 1,5-dimethyl-6-thioxo-3-[2,2,7-trifluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro-2H-1,4-benzoxazin-6-yl]-1,3,5-triazinane-2,4-dione 10.76%

saflufenacil: N′-[2-chloro-4-fluoro-5-(3-methyl-2,6-dioxo-4-(trifluoromethyl)-3, 6-dihydro-1(2H)-pyrimidinyl)benzoyl]-N-isopropyl-N-methylsulfamide 21.51%

Other Ingredients: 67.73%

Total: 100.00%

Contains 1.043 pounds active ingredient trifludimoxazin and 2.086 pounds active ingredient saflufenacil per gallon product formulated as a water-based suspension concentrate

EPA Reg. No. 7969-495 **EPA Est. No. 241-PR-002**

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.)

See full label for complete **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions. **In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).**

FIRST AID: If swallowed: Call a poison control center or doctor immediately for treatment advice. **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. **DO NOT** give anything to an unconscious person. **If in eyes:** Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes. Call a poison control center for treatment advice. **If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth to mouth, if possible. Call a poison control center or doctor for further treatment advice.

(continued)

FIRST AID *(continued)*: **HOTLINE NUMBER:** Have the product container or label with you when calling the poison control center at 1-800-222-1222 or doctor or going for treatment. You may also contact BASF Agricultural Solutions US LLC (hereafter "BASF") for emergency medical treatment information at 1-800-832-HELP (4357).

Precautionary Statements: Hazards to Humans and Domestic Animals. CAUTION. Harmful if swallowed. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. **Environmental Hazards:** For terrestrial uses, **DO NOT** apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate. See label for complete **Environmental Hazards** including **Groundwater Advisory**, **Surface Water Advisory**, **Nontarget Organism Advisory**, **Pollinator Advisory**, and **Reporting Ecological Incidents**.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. **Pesticide Storage: DO NOT** use or store near heat or open flame. Store in original container in a well-ventilated area separately from fertilizer, feed, or foodstuffs. Avoid cross-contamination with other pesticides. **Pesticide Disposal:** Wastes resulting from 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 the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **Container Handling: Nonrefillable Plastic Container. DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. **Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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 1/4 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. See label for complete **Container Handling** instructions.

Net Contents: 1 Gallon 4081168027 NVA 2026-05-0634-0558

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713

BASF
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Safety Data Sheet
Voraxor™ Herbicide

1. Identification

Product identifier used on the label

Voraxor™ Herbicide

Recommended use of the chemical and restriction on use

Recommended use*: crop protection product, herbicide

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27709
USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number: 892280
Synonyms: Trifludimoxazin + Saflufenacil

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Repr.	1B (fertility)	Reproductive toxicity
Repr.	2 (unborn child)	Reproductive toxicity
STOT RE	2	Specific target organ toxicity — repeated exposure

Aquatic Acute	1	Hazardous to the aquatic environment - acute
Aquatic Chronic	1	Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

H373	May cause damage to organs through prolonged or repeated exposure.
H360	May damage fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing and eye protection or face protection.
P260	Do not breathe mist or vapour.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.

Precautionary Statements (Response):

P308 + P313	IF exposed or concerned: Get medical attention.
P391	Collect spillage.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified

Labeling of special preparations (GHS):
Product contains the following components and may cause an allergic skin reaction: The substance may cause sensitization of the skin in particularly sensitive individuals. Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. 1,2-benzisothiazol-3(2H)-one

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Trifludimoxazin
CAS Number: 1258836-72-4
Content (W/W): 10.76 %
Synonym: Trifludimoxazin

saflufenacil
CAS Number: 372137-35-4
Content (W/W): 21.51 %
Synonym: Saflufenacil

Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt
Content (W/W): >= 1.0 - < 3.0%
Synonym: No data available.

bronopol
CAS Number: 52-51-7
Content (W/W): > 0.0 - < 0.1%
Synonym: 2-Bromo-2-nitro-1,3-propanediol; Bronopol

1,2-benzisothiazol-3(2H)-one
CAS Number: 2634-33-5
Content (W/W): > 0.0 - < 0.1%
Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

General advice:
First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, hydrogen fluoride, hydrogen bromide, Hydrogen chloride, nitrogen oxides, silicon oxides, sulfur oxides, halogenated compounds, cyanides
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

Saflufenacil	TWA value 0.824 mg/m3 ;

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:
Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:
Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	liquid
Odour:	faint, sweetish
Odour threshold:	Not determined due to potential health hazard by inhalation.

Colour:	off-white
pH value:	approx. 5 - 7 (100 %(m), 23 °C)
Freezing point:	approx. -5 °C
Boiling point:	The product has not been tested.
Flash point:	Non-flammable.
Flammability:	not applicable
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Autoignition:	460 °C
SADT:	> 75 °C
Vapour pressure:	approx. 23 hPa (20 °C) Information applies to the solvent.
Density:	approx. 1.16 g/cm3 (20 °C)
Vapour density:	not applicable
Partitioning coefficient n-octanol/water (log Pow):	The statements are based on the properties of the individual components.
Information on: saflufenacil	
Partitioning coefficient n-octanol/water (log Pow):	2.6 (20 °C)
---	---
Thermal decomposition:	> 190 °C, 620 kJ/kg (DSC (OECD 113)) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Viscosity, dynamic:	approx. 58 mPa.s (20 °C)
Solubility in water:	dispersible
Evaporation rate:	not applicable
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:
not fire-propagating

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
See SDS section 7 - Handling and storage.

Incompatible materials
strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
> 190 °C (DSC (OECD 113))

Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Oral
Type of value: LD50
Species: rat (female)
Value: > 2,000 mg/kg
No mortality was observed.

Inhalation
Type of value: LC50
Species: rat (male/female)
Value: > 3.4 mg/l
Exposure time: 4 h
An aerosol was tested.
Highest concentration technically achievable.

Dermal
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg
No mortality was observed.

Assessment other acute effects

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion
Assessment of irritating effects: Not irritating to eyes and skin.

Skin
Species: rabbit
Result: non-irritant

Eye
Species: rabbit
Result: non-irritant

Sensitization
Assessment of sensitization: No sensitizing effect.

Buehler test
Species: guinea pig
Result: Non-sensitizing.

Aspiration Hazard
not applicable

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin
Assessment of repeated dose toxicity: Repeated oral exposure may affect certain organs.

Genetic toxicity
Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity
Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin
Assessment of carcinogenicity: In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. Due to the species specific mode of action, the effects are not expected to occur in humans.

Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin
Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals.

Teratogenicity
Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: saflufenacil
Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Other Information
Misuse can be harmful to health.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Very toxic to aquatic life with long lasting effects.
The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

Information on: Trifludimoxazin
LC50 (96 h) > 1.76 mg/l, Oncorhynchus mykiss
LC50 (96 h) > 1.68 mg/l, Cyprinus carpio

Information on: saflufenacil
LC50 (96 h) > 96.8 mg/l, Pimephales promelas (OECD Guideline 203, static)

Aquatic invertebrates

Information on: Trifludimoxazin
EC50 (48 h) > 1.95 mg/l, Daphnia magna
LC50 (48 h) 0.574 mg/l, Americamysis bahia

Information on: saflufenacil
EC50 (96 h) 8.0 mg/l, Daphnia magna (static)

Aquatic plants

Information on: Trifludimoxazin
EC50 (72 h) 0.000821 mg/l (growth rate), Pseudokirchneriella subcapitata
EC10 (72 h) 0.000486 mg/l (growth rate), Pseudokirchneriella subcapitata

EC50 (72 h) 0.000460 mg/l (growth rate), Navicula pelliculosa
EC10 (72 h) 0.000225 mg/l (growth rate), Navicula pelliculosa

Information on: saflufenacil
EC50 (96 h) 0.113 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

Chronic toxicity to fish

Information on: Trifludimoxazin
No observed effect concentration (34 d) 0.0027 mg/l, Cyprinodon variegatus

Information on: saflufenacil
No observed effect concentration (33 d) >= 10 mg/l, Pimephales promelas
---

Chronic toxicity to aquatic invertebrates

Information on: Trifludimoxazin
No observed effect concentration (21 d) 0.0106 mg/l, Daphnia magna

Information on: saflufenacil
No observed effect concentration (21 d) 2.5 mg/l, Daphnia magna
---

Persistence and degradability

Assessment biodegradation and elimination (H2O)
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment biodegradation and elimination (H2O)

Information on: Trifludimoxazin

Not readily biodegradable (by OECD criteria).

Information on: saflufenacil

Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Assessment bioaccumulation potential
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: saflufenacil

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential

Information on: Trifludimoxazin

Bioconcentration factor: 81.6

Mobility in soil

Assessment transport between environmental compartments
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Trifludimoxazin

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Information on: saflufenacil

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:
Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:
Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM

Marine pollutant: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains SAFLUFENACIL, TRIFLUDIMOXAZINE)

Air transport
IATA/ICAO
Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains SAFLUFENACIL, TRIFLUDIMOXAZINE)

Further information
Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Federal Regulations

Registration status:
Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK	CAS Number	Chemical name
NJ	57-55-6	Propylene glycol
PA	57-55-6	Propylene glycol

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Labeling requirements under FIFRA

This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.
CAUTION:

HARMFUL IF SWALLOWED.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

16. Other Information

SDS Prepared by:
BASF Agricultural Solutions US NA Product Regulations
SDS Prepared on: 2023/12/20

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

END OF DATA SHEET