



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:

7969-433

Date of Issuance:

3/26/20

Date of Expiration:

3/26/25

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Alite 27 Herbicide

Name and Address of Registrant (include ZIP Code):

Karen Cain  
Country Regulatory Manager Herbicides  
BASF Corporation, Agricultural Products  
P.O. Box 13528  
Research Triangle Park, NC 27709-3528

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

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

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

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

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. This registration and the registered new use of isoxaflutole on isoxaflutole-resistant soybeans will **automatically expire on March 26, 2025** unless the agency amends this condition otherwise.

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Signature of Approving Official:

Dan Kenny, Chief  
Herbicide Branch, Registration Division (7505P)

Date:

3/26/20

3. You must develop and follow an Herbicide Resistance Management Plan as described in Appendix A.
4. You must submit annual reports to the Agency by January 15th of each year beginning in 2021 as outlined in Appendix A Section D, "Reporting Component," until the Agency amends this condition otherwise.
5. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSF:

- Basic CSF dated 10/29/2018

If you have any questions, please contact Grant Rowland by phone at 703-347-0254, or via email at [rowland.grant@epa.gov](mailto:rowland.grant@epa.gov).

Enclosure

Appendix A – Herbicide Resistance Management Plan and Reporting Requirements for Isoxaflutole Use on Isoxaflutole Resistant Soybeans.

## APPENDIX A

### **Herbicide Resistance Management Plan and Reporting Requirements for Isoxaflutole Use on Isoxaflutole Resistant Soybeans**

BASF Corporation (BASF) must comply with the following:

#### *A. Educational Component*

1. Develop and implement an education program for users of this product that identifies appropriate best management practices (BMPs) to avoid and control weed resistance, and convey to users the importance of following BMPs.

The following are examples of BMPs:

#### Crop selection and cultural practices

- Understand the biology of the weeds present.
- Use a diversified approach towards weed management focused on preventing weed-seed production and reducing the number of weed seeds in the soil seed-bank.
- Emphasize cultural practices that suppress weeds by using crop competitiveness.
- Plant into weed-free fields, keep fields as weed-free as possible, and note areas where weeds were a problem in prior seasons.
- Incorporate additional weed-control practices whenever possible, such as mechanical cultivation, biological management practices, crop rotation, and weed-free crop seeds, as part of an integrated weed-control program.
- Do not allow weed escapes to produce seeds, roots, or tubers.
- Manage weed seed at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
- Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Fields should be scouted before application to ensure herbicide and application rates will be appropriate for the weed species and weed sizes present.
- Fields should be scouted after application to confirm herbicide effectiveness and to detect weed escapes.
- If resistance is suspected, treat weed escapes with a different mechanism-of-action herbicide or use non-chemical methods to remove weed escapes.

#### Herbicide selection

- Use a broad spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed control program.
- A broad-spectrum weed-control program should consider all of the weeds present in the field. Weeds should be identified through scouting and field history.

- Difficult-to-control weeds may require sequential applications of herbicides with alternative mechanisms of action.
  - Fields with difficult-to-control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action.
  - Apply full rates of this herbicide for the most difficult to control weeds in the field. Applications should be made when weeds are at the correct size to minimize weed escapes.
  - Do not use more than two applications of this herbicide or any herbicide with the same mechanism of action within a single growing season unless mixed with another mechanism of action herbicide with overlapping spectrum for the difficult to control weeds.
  - Report any incidence of non-performance of this product against a particular weed species to BASF or its representatives.
2. Include at least one written communication to users of this product each year regarding herbicide-resistance management.
  3. Provide a copy of the education materials to EPA upon request.

*B. Field Detection and Remediation Components*

1. If any user informs BASF or its representatives of a lack of herbicide efficacy in a weed species listed on product labeling, then BASF or its representatives must make an effort to evaluate the field for suspected resistance to this product by applying the criteria below, as set forth in Norsworthy, *et al.*, “Reducing the Risks of Herbicide Resistance: Best Management Practices and Recommendations” *Weed Science* 2012 Special Issue: 31-62;

*Criteria for Determining Suspected Herbicide Resistance*

- 1) *Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; and/or*
  - 2) *A spreading patch of non-controlled plants of a particular weed species; and/or*
  - 3) *Surviving plants mixed with controlled individuals of the same species.*
2. If one or more of the above criteria are met, then:
    - a. Provide the user with specific information and recommendations to control and contain suspect weeds, including re-treatment and/or other non-chemical controls, as appropriate. If requested by the user, BASF will become actively involved in implementation of weed control measures.
    - b. Request, at the time of the initial determination that one or more of the above criteria are met and prior to any application of alternative control practices, that the user provide access to the relevant field(s) to collect specimens of the suspect weeds (potted specimens or seeds) for potential further evaluation in the greenhouse or laboratory, and to collect such specimens if possible (or, alternatively, request that the user provide such specimens to BASF at BASF’s

expense).

- c. Conduct greenhouse or laboratory studies to confirm resistance as soon as practicable following sample collection, if technically feasible.
  - d. To the extent possible, contact or visit the user in an appropriate timeframe after implementation of the additional weed control measures in order to evaluate success of such measures.
  - e. If the additional weed control measures were not successful in controlling the suspected-resistant weeds, then:
    - i. Work with the user to determine the reason(s) why the additional control measures were unsuccessful;
    - ii. Offer to provide technical expertise on how to control and contain the suspected-resistant weeds, including re-treatment and/or other non-chemical controls, as appropriate; and
    - iii. Report annually the inability to control the suspected-resistant weeds to relevant stakeholders.
3. Keep records of all field evaluations for suspected resistance for a minimum of three years, and provide a copy to EPA upon request.

*C. Evaluation Component*

1. Conduct annual surveys to determine whether users have encountered any perceived issues with non-performance or lack of efficacy of this product, and if so, how users have responded. This survey must be based on a statistically-representative sample of users. The sample size and geographical resolution should be adequate to allow analysis of responses within regions, between regions, and across the United States.
2. Analyze the survey results each year, and modify the following for the upcoming growing season, as appropriate:
  - a. Efforts aimed at achieving compliance with BMPs;
  - b. Responses to incidents of suspected weed resistance and confirmed weed resistance; and
  - c. The education program. At the initiative of either EPA or BASF, both parties shall consult about possible modifications to the education program.

*D. Reporting Component*

1. Submit reports to EPA by January 15<sup>th</sup> of each year, beginning in 2019, with information on:

- a. Annual sales of this product by state;
  - b. Annual sales of soybean seed containing isoxaflutole-resistant trait by state;
  - c. The current education program. The first report shall include the current education program and its associated materials. Subsequent annual reports shall include updates of any aspect of the education program and associated materials that have materially changed since submission of the previous annual report;
  - d. Summary of efforts aimed at achieving compliance with the BMPs;
  - e. Investigation and remediation of cases on suspected-resistant weeds. Summary of determinations as to whether any reported lack of herbicide efficacy was due to suspected-resistance, any follow-up actions taken, and if available, the final outcome (e.g., evaluation of success of additional weed control measures) regarding each case of suspected-resistance. The annual report shall list the cases by county and state;
  - f. Summary of the status of any laboratory and greenhouse testing performed by or at the direction of BASF, in response to cases of suspected-resistance, performed in the previous year. Data pertaining to such testing need not be included in the annual reports, but such data must be made available to EPA upon request; and
  - g. The annual survey, including whether users are implementing herbicide resistance BMPs, and a summary of BASF's annual review and any modifications based on the survey results.
2. Following submission of the annual report, BASF shall meet with EPA at EPA's request in order to evaluate and consider the information contained in the report.

**RESTRICTED USE PESTICIDE**

May injure susceptible non-target plants.

For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification. Commercial and certified applicators must ensure that all persons involved in these activities are informed of the precautionary statements.



ISOXAFLUTOLE	GROUP	<b>27</b>	HERBICIDE
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We create chemistry

# Alite<sup>®</sup> 27 Herbicide

For: weed control in isoxaflutole-resistant soybean grown in select counties in certain states.

**This product can only be used on GT27 or isoxaflutole-resistant soybean. Crops not containing a gene expressing an HPPD protein will not be tolerant to Alite 27 Herbicide**

[In the state of MN and WI use is only allowed in accordance with the State Specific Product Bulletin.]

**ACTIVE INGREDIENT(S):**

Isoxaflutole [5-cyclopropyl-4-(2-methylsulfonyl-4-trifluoromethylbenzoyl) isoxazole] ..... **40.50%**

**OTHER INGREDIENTS:** ..... **59.50%**

**TOTAL:** ..... **100.00%**

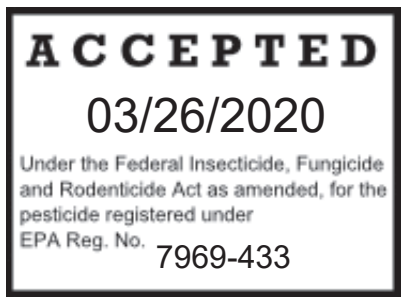
Contains 4.00 pounds isoxaflutole per U.S. gallon

**EPA Reg. No. 7969-433**

**EPA Est.**

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-832-HELP (4357)**



BASF  
26 Davis Drive  
Research Triangle Park, North Carolina 27709

## FIRST AID

<b>If Swallowed:</b>	<ul style="list-style-type: none"><li>• Immediately call a poison control center or doctor for treatment advice.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on Skin or Clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If in Eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If Inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>In case of emergency, call the toll-free BASF Emergency Response telephone number: 1-800-832-HELP (4357). Have a product container or label with you when calling a poison control center or doctor, or going for treatment.</b>	
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.
- Avoid breathing vapor or spray mist.
- 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)

Some of the materials that are chemical-resistant to this product are listed below. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride,
- Shoes plus socks and protective eyewear.
- When mixing/loading or cleaning equipment, wear a chemical resistant apron in addition to the other required PPE.

#### 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 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.



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## ENVIRONMENTAL HAZARDS

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Drift or runoff may adversely affect non-target plants. Drift and runoff may be hazardous to aquatic organism in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Do not apply when weather conditions favor drift from treated areas. Do not use the same spray equipment for other purposes unless thoroughly cleaned. Do not contaminate water used for irrigation or domestic purposes.

This chemical is known to leach through soil into shallow ground water under certain conditions as a result of agricultural use. Thus, use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Isoxaflutole residues can contaminate surface water through spray drift. Under some conditions, isoxaflutole residues may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips and areas over-laying tile drainage systems that drain to surface water.

In fields having sands, loamy sands and sandy loam soils, special care should be taken not to over-irrigate since substantial over-irrigation promotes the leaching of chemicals.

This pesticide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected if the pesticide is allowed to drift from areas of application. Exposure to isoxaflutole residues may injure or kill susceptible plants. Symptoms of phytotoxicity as a result of exposure to isoxaflutole include whitening or chlorosis of the foliage of affected plants. Cotton is particularly susceptible to isoxaflutole; therefore, exposure of cotton to isoxaflutole residues may affect cotton yield. To prevent damage to crops and other desirable plants, read and follow all directions and precautions on this label before using.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to exclude completely precipitation from contact shall be of sufficient capacity to contain at a minimum of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

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

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## CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

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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 BASF. 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, BASF 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 BASF is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF 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 BASF'S ELECTION, THE REPLACEMENT OF PRODUCT.

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## DIRECTIONS FOR USE

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### RESTRICTED USE PESTICIDE

**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.

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

**[In Minnesota, this product must only be used in accordance with the Minnesota Product Bulletin. The Minnesota Product Bulletin, which accompanies the sale and packaging of the product, must be in possession of the user at the time of pesticide application.]**

**[In Wisconsin, this product must only be used in accordance with the Wisconsin Product Bulletin. The Wisconsin Product Bulletin, which accompanies the sale and packaging of the product, must be in possession of the user at the time of pesticide application.]**

### 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
- Socks plus chemical resistant footwear
- Protective eye wear

**For use over the top of GT27 or isoxaflutole-resistant soybean. Prior to purchase user must check list of counties at end of label. Do not use in any county not included on the list. Alite 27 Herbicide can only be used on soybeans in the counties listed.**

### PRODUCT INFORMATION

ALITE™ 27 Herbicide:

- is a selective herbicide for control of important broadleaf and grass weeds in GT27 or isoxaflutole-resistant soybeans.
- is formulated as a soluble concentrate (SC) containing 4 pounds of isoxaflutole active ingredient per gallon.
- contains the active ingredient isoxaflutole which is an HPPD 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, and auxin- herbicide resistant populations of weed species.

## USE RESTRICTIONS

- Use on coarse textured soils with a shallow water table – All Registered Uses:
  - In the states of AR, CO, GA, KS, KY, LA, MO, MS, NC, OK, TN, TX, VA, and WV: if the water table (i.e, level of saturation) is less than 25 feet below the ground surface or or the depth to the water table is unknown, do not use if all 3 criteria are met. If less than three criteria are met or the water table is greater than 25 feet below the ground surface, there is no restriction against application:
    - The surface soil texture is loamy sand or sand
    - The subsoil texture is loamy sand or sand
    - The average organic matter (in the upper 12 inches) is less than 2% by weight
  - In the states of IN, MI, MT, ND, NE, OH, PA, and SD: if the water table (i.e, level of saturation) is less than 25 feet below the ground surface or or the depth to the water table is unknown, do not use if all 3 criteria are met. If less than three criteria are met or the water table is greater than 25 feet below the ground surface, there is no restriction against application:
    - The surface soil texture is sandy loam, loamy sand or sand
    - The subsoil texture is loamy sand or sand
    - The average organic matter (in the upper 12 inches) is less than 2% by weight
- Maximum yearly application rate is 3 fluid ounces/acre.
- [In Minnesota, this product must only be used in accordance with the Minnesota Product Bulletin. The Minnesota Product Bulletin, which accompanies the sale and packaging of the product, must be in possession of the user at the time of pesticide application.]
- [In Wisconsin, this product must only be used in accordance with the Wisconsin Product Bulletin. The Wisconsin Product Bulletin, which accompanies the sale and packaging of the product, must be in possession of the user at the time of pesticide application.]
- Do not apply this product using aerial application equipment.
- Do not apply this product through any type of irrigation system.
- Do not use flood or furrow irrigation to apply, activate or incorporate this product.
- Do not irrigate this product into coarse soils at planting time when soils are saturated.
- To prevent off-site movement of soil containing this product to non-target areas, do not apply ALITE 27 Herbicide to areas receiving less than 15 inches of average annual precipitation unless supplemented to at least the equivalent of 15 inches of annual precipitation with irrigation water.
- Do not use on non GT27 or nonisoxaflutole-resistant crops or crop injury will result.
- Do not apply ALITE 27 Herbicide on coarse textured soils that have organic matter of less than 1.5% and a soil pH greater than 7.5.
- Do not apply more than 3.0 fluid ounces of ALITE 27 Herbicide (0.094 lb) per acre in one year or exceed the maximum labelled rate for any given soil type.
- **Do Not apply more than two applications of ALITE 27 Herbicide per growing year**
- Do not apply tank-mixes of ALITE 27 Herbicide with organophosphate or carbamate insecticides to emerged soybeans. Foliar applications of an organophosphate or carbamate insecticides should not be made within 7 days of an application of ALITE 27 Herbicide or crop injury may result.
- Do not harvest grain within 70 days of application.
- Do not graze or feed treated forage or hay from soybeans to livestock.

## APPLICATION INSTRUCTIONS

ALITE™ 27 Herbicide:

- To be applied **only** to GT27 or isoxaflutole-resistant soybeans. Applications to non isoxaflutole-resistant crops will result in crop injury.
- To be used in either conventional, conservation tillage, or no-till crop management systems.
- To be applied either preplant (surface applied or incorporated (less than 2" deep), preemergence or postemergence.
- Provides 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.
- To be applied in tank mixtures with additional herbicides, for effective resistance management.
- To be applied in sequential applications with other herbicides.
- To be applied by ground application only. Aerial application is not permitted.
- To be applied as either a broadcast spray or as a band application.

## Ground Application (Banding)

Banding herbicide application equipment must be carefully calibrated to prevent crop exposure to concentrations of ALITE 27 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:

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

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

## Ground Application (Broadcast)

Apply ALITE 27 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. Keep the spray boom at the lowest possible spray height above the target surface. Refer to nozzle manufacturer's recommendations for proper nozzle, pressure setting, and sprayer speed for optimum product performance and minimal spray drift. Uneven application, sprayers not properly calibrated, or improper incorporation 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 recommendations as excessive rates may result in adverse crop responses and potential stand loss. Maintain adequate agitation at all times, including momentary stops.

## RESISTANCE MANAGEMENT

**Alite 27 Herbicide** is a **Group 27** herbicide, i.e., an HPPD inhibitor. A given weed population may contain or develop resistance to a herbicide after repeated use. Appropriate resistance management strategies should be followed to mitigate or delay resistance. The following integrated weed management techniques are effective in reducing problems with herbicide resistant weed biotypes. It is best to use multiple practices to manage or delay resistance, as no single strategy is likely to be totally effective.

Contact your local BASF representative, crop advisor or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions.

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

- Rotate the use of ALITE 27 Herbicide or other Group 27 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.
- 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 your local BASF representative. You can also contact your pesticide distributor or university extension specialist to report resistance.

## SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

**Do not aerially apply this product.**

### Wind Speed

Do not apply at wind speeds greater than 10 mph.

### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### Temperature Inversions

Applications should not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source 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.

## TANK MIXING INSTRUCTIONS

Prior to making a tank mixture, compatibility of the tank mix products should first be tested. 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 tankmix product.

### Order of Mixing

The proper mixing procedure for tank mixing ALITE 27 Herbicide with other registered pesticides using as a carrier is as follows:

1. Fill the spray tank 1/4 to 1/2 of the required volume of water prior to the addition of ALITE 27 Herbicide.
2. Add the proper amount of ALITE 27 Herbicide, then add the remaining amount of the water
3. Maintain sufficient agitation to ensure a uniform spray mixture during application.
4. When ALITE 27 Herbicide is applied in a tank mixture with other pesticides, add ALITE 27 Herbicide to the spray tank first and ensure it is thoroughly dispersed before adding other pesticides.
5. Continue to fill the tank with carrier to the desired volume while agitating. Continue agitation during application to ensure a uniform spray mixture.

### Re-Suspending Products In Spray Solution

Like other suspension concentrates (SCs), ALITE 27 Herbicide will settle if left standing without agitation. If the spray solution is allowed to settle for one hour or more, reagitrate the spray solution for a minimum of 10 minutes before application.

### Equipment Cleanup 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.
8. Cleanup should 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 ALITE 27 Herbicide remaining in the soil. The amount of ALITE 27 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 ALITE 27 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 ALITE 27 Herbicide:

Crop	Registered states	Rotational Interval (months)	Minimum Precipitation Requirement <sup>1</sup>
Corn (Field), GT27 Soybeans, isoxaflutole-resistant soybeans	All	0	None
Wheat, Triticale, Cereal rye	All	4	
Soybeans (all non isoxaflutole-resistant soybeans), Barley, Sweet corn, Popcorn, Potato, Grain Sorghum, Oats, Rye, Sunflower	All	6	
Alfalfa, Cotton, Rice	All	10	15 inches of cumulative precipitation from application to planting of rotational crop. <sup>2</sup>
Sugar beets	East of the Mississippi River		
Peanut	All	11	
Tobacco	All	12	
Sugar beets	West of the Mississippi River	18	
All other crops <sup>3</sup>	All		

<sup>1</sup> The amount of cumulative precipitation required before planting a rotational crop is in addition to the required rotational interval given in months.

<sup>2</sup> Furrow or Flood irrigation not to be included in total. No more than 7 inches of overhead irrigation included in total.

<sup>3</sup> All other crops may be seeded only after the completion of a successful bioassay after a ALITE 27 Herbicide application. Refer to the "Field/Small Scale Bioassay" section.

**In the event of crop failure:** If the GT27 or isoxaflutole-resistant soybean crop treated with ALITE 27 Herbicide is lost, only field corn, corn grown for silage or GT27 soybeans or isoxaflutole-resistant soybeans may be replanted immediately. Do not make an additional application of ALITE 27 Herbicide.

## Cover Crops

Use of cover crops as a means of soil improvement, erosion control, weed and/or insect suppression, etc., following harvest in the fall is increasing. Planting cover crops in fields treated with ALITE 27 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 ALITE 27 Herbicide. However, all potential cover crops have not been evaluated for tolerance to ALITE 27 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 ALITE 27 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 ALITE 27 Herbicide. The test strip should be placed in a controlled area and should include low areas and knolls, and include variations in soil such as 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 ALITE 27 Herbicide.

For an effective **small scale bioassay**, collect uniform samples of all soil types from the ALITE 27 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 ALITE 27 Herbicide-treated field should be tolerable.



## WEEDS CONTROLLED Preplant (Surface/Incorporate), Preemergence

ALITE 27 Herbicide applied preplant surface/incorporated or preemergence will provide residual control or suppression (partial control) of the weeds listed below. ALITE 27 Herbicide is recommended to always be tankmixed with other herbicides or applied sequentially with other herbicides to control additional weeds, and provide proper weed resistance management (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.

### WEEDS CONTROLLED- PREPLANT SURFACE/INCORPORATE AND PREEMERGENCE APPLICATIONS

BROADLEAF WEEDS CONTROLLED <sup>1</sup>									
Weeds (Common Names)	ALITE 27 Herbicide Plus:				Weeds (Common Names)	ALITE 27 Herbicide Plus:			
	ALITE 27 Herbicide Alone	Metribuzin	PPO Herbicide <sup>2</sup>	Acetamide Herbicide <sup>3</sup>		ALITE 27 Herbicide Alone	Metribuzin	PPO Herbicide <sup>2</sup>	Acetamide Herbicide <sup>3</sup>
Amaranth, Palmer <sup>5</sup>	C	C	C	C	Pennycress, field	C	C	C	C
Anoda, spurred		C	PC		Pepperweed, Virginia	C	C	C	C
Beggarweed, Florida		C	PC	PC	Pigweed, prostrate	C	C	C	C
Buffalobur	C	C	C	C	Pigweed, red root	C	C	C	C
Burcucumber	PC	PC	PC	PC	Pigweed, smooth	C	C	C	C
Buttercup, small flower	C	C	C	C	Plantain, broadleaf <sup>4</sup>	PC	PC	PC	PC
Carpetweed		C	PC	C	Poinsetta, wild			C	
Chamomile spp.	C	C	C	C	Purslane, common	C	C	C	C
Chickweed, common	C	C	C	C	Pusley, Florida		C	PC	C
Cocklebur, common <sup>4</sup>		PC	PC		Radish, wild	C	C	C	C
Copperleaf, hophornbeam	C	C	C	C	Ragweed, common	C	C	C	C
Croton, tropic			PC		Ragweed, giant <sup>4</sup>	PC	PC	PC	PC
Dandelion (seedling)	C	C	C	C	Sesbania, hemp		C	PC	
Deadnettle, purple	C	C	C	C	Shepherds-purse	C	C	C	C
Eclipta			C		Sicklepod		C		
Galinsoga	C	C	C	C	Sida, prickly (Teaweed)		C	PC	PC
Henbit	PC	PC	PC	PC	Smartweed, ladysthumb		C	PC	
Jimsonweed	C	C	C	C	Smartweed, Pennsylvania	C	C	C	C
Kochia	C	C	C	C	Speedwell, corn	PC	PC	PC	PC
Lambsquarters, common	C	C	C	C	Spurge, toothed	C	C	C	C
Mallow, Venice	C	C	C	C	Starbur, bristly		C	PC	
Marestail (Horseweed)	C	C	C	C	Sunflower, wild <sup>4</sup>		C		
Medic, black	PC	PC	PC	PC	Thistle, Russian	C	C	C	C
Morningglory, spp. <sup>4</sup>			PC		Velvetleaf	C	C	C	C
Mustard, wild	C	C	C	C	Violet, field <sup>4</sup>	PC	PC	PC	PC
Nightshade, black	C	C	C	C	Waterhemp, common <sup>5</sup>	C	C	C	C
Nightshade, eastern black	C	C	C	C	Waterhemp, tall <sup>5</sup>	C	C	C	C
Nightshade, hairy			PC	PC					

<sup>1</sup> C = Control, PC = Partial control. Partially controlled weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas; performance may not be commercially acceptable. The degree of weed control will vary with weed size, density, spray coverage, and/or growing conditions.

<sup>2</sup> PPO herbicides such as fomasafen-, flumioxazin-, or sulfentrazone-containing products.

<sup>3</sup> Acetamide herbicides such as alachlor-, acetochlor-, dimethenamide-, metolachlor- or pyroxasulfone-containing products.

<sup>4</sup> These weeds may require a postemergence application of an appropriate postemergence herbicide for improved control.

<sup>5</sup> These weeds may require a postemergence application of an appropriate postemergence herbicide for control of late-emerging weeds.



**WEEDS CONTROLLED- PREPLANT SURFACE/INCORPORATE AND PREEMERGENCE APPLICATIONS**

GRASS/SEDGES CONTROLLED <sup>1</sup>									
Weeds (Common Names)	ALITE 27 Herbicide Plus:				Weed (Common Names)	ALITE 27 Herbicide Plus:			
	ALITE 27 Herbicide Alone	Metribuzin	PPO Herbicide <sup>2</sup>	Acetamide Herbicide <sup>3</sup>		ALITE 27 Herbicide Alone	Metribuzin	PPO Herbicide <sup>2</sup>	Acetamide Herbicide <sup>3</sup>
Barnyardgrass	C	C	C	C	Goosegrass	C	C	C	C
Bluegrass, annual	PC	C	PC	PC	Johnsongrass, seedling	C	C	C	C
Crabgrass, large	C	C	C	C	Millet, wild proso <sup>4</sup>	C	C	C	C
Crabgrass, smooth	C	C	C	C	Nutsedge, yellow			PC	PC
Crowfootgrass		C		PC	Panicum, fall	C	C	C	C
Cupgrass, woolly <sup>4</sup>	C	C	C	C	Panicum, Texas	C	C	C	C
Foxtail, bristly	C	C	C	C	Rice, red			PC	C
Foxtail, giant	C	C	C	C	Sandbur, field <sup>4</sup>	PC	PC	PC	PC
Foxtail, green	C	C	C	C	Shattercane <sup>4</sup>	PC	PC	PC	PC
Foxtail, robust purple	C	C	C	C	Signalgrass, broadleaf <sup>4</sup>	C	C	C	C
Foxtail, robust white	C	C	C	C	Sprangletop, red				PC
Foxtail, yellow <sup>4</sup>	C	C	C	C	Witchgrass				C

<sup>1</sup> C= Control, PC=Partial control. Partially controlled weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas; performance may not be commercially acceptable. The degree of weed control will vary with weed size, density, spray coverage, and/or growing conditions.  
<sup>2</sup> PPO herbicides such as fomasafen, flumioxazin, or sulfentrazone-containing products.  
<sup>3</sup> Acetamide herbicides such as alachlor, acetochlor, dimethenamide, metolachlor or pyroxasulfone-containing products.  
<sup>4</sup> These weeds may require the addition of a pre-emergence grass herbicide tank-mix partner or an appropriate post-emergence herbicide application for control of late season escapes.

**Preplant Burndown, Postemergence**

ALITE 27 Herbicide applied preplant burndown/postemergence controls or suppresses many small grass and broadleaf weeds as shown below as well as offering residual activity of those weeds listed in the WEEDS CONTROLLED-PREPLANT SURFACE/INCORPORATE AND PREEMERGENCE APPLICATIONS tables above. Tankmixtures of ALITE 27 Herbicide with additional herbicides are always recommended to broaden the spectrum of grass and broadleaf weeds controlled (refer to the TANK MIXTURE section of this label for a listing of potential for a listing of possible). To control weeds which have already emerged, tank mix ALITE 27 Herbicide with other herbicides labeled for postemergence control of the target weeds. Always refer to the tank mix partner labels for specific use rates, application timings and additional instructions.

BROADLEAVES/GRASSES CONTROLLED <sup>1</sup>					
Weeds (Common names)	Alite 27 Herbicide Alone		Weeds (Common Names)	Alite 27 Herbicide Alone	
	2 oz	3 oz		2 oz	3 oz
	Apply to Weeds 1-3 Inches Tall			Apply to Weeds 1-3 Inches Tall	
Amaranth, Palmer	PC	C	Nightshade, black	C	C
Barnyardgrass	PC	C	Nightshade, eastern black	PC	C
Bermudagrass	C	C	Oat, wild	PC	PC
Buckwheat, wild	PC	PC	Panicum, fall	PC	C
Carpetweed	PC	C	Pennycress, field	C	C
Chickweed, common	C	C	Pigweed, prostrate	C	C
Cocklebur, common	C	C	Pigweed, red root	C	C
Crabgrass, large	PC	C	Pigweed, smooth	PC	PC
Cudweed, low	C	C	Pigweed, tumble	C	C
Dandelion (seedling)	C	C	Plantain, broadleaf	C	C
Deadnettle, purple	C	C	Purslane, common	C	C
Foxtail, bristly	PC	PC	Ragweed, common	C	C
Foxtail, giant	PC	PC	Ragweed, giant	PC	C
Foxtail, green	PC	PC	Sandbur, field	PC	C
Foxtail, robust purple	PC	PC	Scouringrush	PC	C
Foxtail, yellow	PC	PC	Shattercane	PC	C
Galinsoga	C	C	Shepherd's-purse	C	C
Goosegrass	PC	C	Sicklepod		PC
Henbit	C	C	Sida, prickly	PC	C
Jimsonweed	PC	C	Signalgrass, broadleaf		PC
Johnsongrass (seedling)	PC	PC	Smartweed, ladysthumb	PC	PC

Lambsquarters, common	C	C	Smartweed, pale		PC
Lettuce, prickly	C	C	Sowthistle, annual	C	C
Mallow, Venice	PC	C	Sowthistle, perennial	C	C
Marestail (Horseweed)	C	C	Starbur, bristly		PC
Medic, black	PC	C	Velvetleaf	C	C
Millet, wild proso	PC	PC	Waterhemp, common	PC	C
Morningglory, entireleaf		PC	Waterhemp, tall	PC	C
Morningglory, ivyleaf		PC	Witchgrass	PC	PC
Morningglory, pitted		PC			
<sup>1</sup> C= Control, PC=Partial control. Partially controlled weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas; performance may not be commercially acceptable. The degree of weed control will vary with weed size, density, spray coverage, and/or growing conditions. Increasing the rate of ALITE 27 Herbicide not only improves control of certain target weeds but also improves the residual weed control activity.					

Alite 27 should always be tank mixed with additional effective mode-of-action herbicides to achieve broadspectrum weed control and to be used as part of a sustainable Integrated weed management program.

ALITE 27 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 such as rotary hoe to lightly incorporate ALITE 27 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.

- **Planting depth:** GT27 or isoxaflutole-resistant soybean seed should be planted a minimum of 1 inch deep and must be completely covered with soil and furrow closed to reduce the risk of crop injury or stand loss.
- **Effect of variable soils on use rate:** The proper use rate of ALITE 27 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 ALITE 27 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 and soils with iron deficiency chlorosis. The user is responsible for selecting the rate of ALITE 27 Herbicide that is appropriate for all soils in the area of application.
- **Effect of adverse weather:** Following an application of ALITE 27 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 chlorosis and/or crop stunting. Soybean plants usually recover from this injury without affecting yield.
- **Carryover:** Carryover from Command<sup>®</sup> herbicide (clomazone active ingredient) use can increase the potential for adverse crop response.

## APPLICATION RATE

Application Timing	Rate of ALITE 27 Herbicide per Acre <sup>1, 2, 3</sup>					
	Soil Texture					
	Coarse Soils Sand, Loamy sand, Sandy loam		Medium Soils Loam, Silt loam, Silt, Sandy clay loam		Fine Soils Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay	
	< 1.5% O.M. <sup>4</sup>	> 1.5% O.M.	< 1.5% O.M.	>1.5% O.M.	< 1.5% O.M.	> 1.5% O.M.
Early Preplant (Surface Applied or Incorporated) 8 to 21 days prior to planting	2.0 fluid ounces	2.0 to 2.5 fluid ounces	2.0 to 3.0 fluid ounces			
Preplant (Surface Applied or Incorporated) 0 to 7 days prior to planting or preemergence	1.5 fluid ounces	1.5 to 2.0 fluid ounces	2.0 to 2.5 fluid ounces	2.0 to 3.0 fluid ounces		
Postemergence Emergence up to but not including first bloom soybean growth stage	1.5 to 2.0 fluid ounces		2.0 to 3.0 fluid ounces			

ALITE 27 Herbicide may be applied up to 21 days prior to planting when used as part of a planned sequential herbicide application program (i.e. ALITE 27 Herbicide tank mixture followed by a planned postemergence herbicide application).

<sup>1</sup> Use the higher rates within the rate ranges shown for ALITE 27 Herbicide when one or more of the following situations is present in the field to be sprayed: weeds present are known to be resistant to one or more of the herbicide mode-of actions being applied, weeds are not controlled by potential tank mix partners or heavy weed populations are expected.

<sup>2</sup> When using ALITE 27 Herbicide on fields with variable soils, optimum weed control will result when the overall application rate is based on the predominant soil type(s) within a field.

<sup>3</sup> Use of ALITE 27 on areas of the field with clay knolls, eroded hill sides, terraces with scraped exposed subsoil, soil pH  $\geq$  7.5, iron deficiency chlorosis, or on other areas of coarser and/or lower organic matter soils may cause an adverse crop response.

<sup>4</sup> ALITE 27 Herbicide is not recommended for use coarse textured soils that have organic matter of less than 1.5% and a soil pH greater than 7.5.

O.M. = Organic Matter by weight

Application of ALITE 27 Herbicide at less than specified rates for the appropriate soil will only provide suppression of sensitive weeds.

## APPLICATION TIMING

### Preplant Surface-Applied

ALITE 27 Herbicide may be applied up to 21 days before planting GT27 or isoxaflutole-resistant soybeans. Refer to the label of the respective sequential partner for specific use directions. The total ALITE 27 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.

### Preplant Incorporated

ALITE 27 Herbicide may be applied up to 21 days before planting GT27 or isoxaflutole-resistant soybeans. Refer to the label of any sequential partner label for specific use directions. Apply to the soil and uniformly incorporate in the top two inches of soil before planting using a finishing disc, field cultivator or similar implement capable of providing uniform two inch incorporation. Do not incorporate ALITE 27 Herbicide deeper than 2" or weed control may be reduced.

### **Preplant/Preemergence Burndown**

When weeds are present at the time of treatment and prior to GT27 or isoxaflutole-resistant soybean emergence, ALITE 27 Herbicide with COC or MSO are recommended for burndown of labeled weeds 3" or less in height. When weeds are greater than 3" in height or weeds not controlled by ALITE 27 Herbicide are present, the addition of a burndown herbicide (e.g., Liberty® 280 Herbicide, Gramoxone®/ paraquat, glyphosate, or 2,4-D) is recommended. Observe directions for use and precautions and restrictions on the label of the burndown herbicide.

**Preemergence:** Apply ALITE 27 Herbicide during planting (behind the planter after furrow closure) or after planting of GT27 or isoxaflutole-resistant soybeans, but before weeds or crop emerge.

**Postemergence:** Apply ALITE 27 Herbicide to GT27 or isoxaflutole-resistant soybeans at growth stages from emergence up to but not including first bloom. Mixing with adjuvants such as COC, MSO, etc. is not recommended for postemergence applications of ALITE 27 Herbicide as crop response such as leaf chlorosis and stunting may result.

### **SEQUENTIAL APPLICATION INSTRUCTIONS**

ALITE 27 Herbicide is most effective when applied as a residual preplant/preemergence soil application in an integrated weed control program that includes sequential postemergence herbicide application(s). The total ALITE 27 Herbicide rate applied per year may not exceed 3 fluid ounces/acre.

Refer to all parts of the individual product labels of herbicides used in sequence with ALITE 27 Herbicide.

## **STORAGE AND DISPOSAL**

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

### **Pesticide storage**

Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry secured storage area.

### **Pesticide disposal**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

### **Container handling**

#### **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.

#### **Rigid Non-refillable containers (greater than 5 gallons or 50 lbs)**

### **Non-refillable Containers**

Non-refillable containers - Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal.

Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

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

### Refillable Containers

Refillable container – Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or BASF for container return, disposal and recycling information.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure 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. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

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. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

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

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

### Listing of Common and Scientific Weed Names

Amaranth, Palmer	<i>Amaranthus palmeri</i>	Nightshade, eastern black	<i>Solanum ptycanthum</i>
Anoda, spurred	<i>Anoda cristata</i>	Nightshade, hairy	<i>Solanum sarrachoides</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>	Nutsedge, yellow	<i>Cyperus esculentus</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>	Oat, wild	<i>Avena fatua</i>
Bermudagrass	<i>Cynodon dactylon</i>	Panicum, fall	<i>Panicum dichotomiflorum</i>
Buffalobur	<i>Solanum rostratum</i>	Panicum, Texas	<i>Panicum texanum</i>
Burcucumber	<i>Sicyos angulatus</i>	Pennycress, field	<i>Thlaspi arvensis</i>
Buttercup, small flower	<i>Ranunculus parviflorus</i>	Pepperweed, Virginia	<i>Lepidium virginicum</i>
Carpetweed	<i>Mullugo verticillata</i>	Pigweed, prostrate	<i>Amaranthus blitoides</i>
Chamomile spp.	<i>Matricaria spp.</i>	Pigweed, red root	<i>Amaranthus retroflexus</i>
Chickweed, common	<i>Stellaria media</i>	Pigweed, smooth	<i>Amaranthus hybridus</i>
Cocklebur, common	<i>Xanthium strumarium</i>	Pigweed, tumble	<i>Amaranthus albus</i>
Copperleaf, hophornbeam	<i>Acalypha ostryaefolia</i>	Plantain, broadleaf	<i>Plantago major</i>
Crabgrass, large	<i>Digitaria sanguinalis</i>	Poinsetta, wild	<i>Euphorbia heterophylla</i>
Crabgrass, smooth	<i>Digitaria ischaemum</i>	Purslane, common	<i>Portulaca oleracea</i>
Croton, tropic	<i>Croton glandulosus</i>	Pusley, Florida	<i>Richardia scabra</i>
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	Radish, wild	<i>Rapanus raphanistrum</i>
Cudweed, low	<i>Gnaphalium uliginosum</i>	Ragweed, common	<i>Ambrosia eliator</i>
Cupgrass, woolly	<i>Eriochloa villosa</i>	Ragweed, giant	<i>Ambrosia trifida</i>
Dandelion (seedling)	<i>Taraxicum officinale</i>	Rice, red	<i>Oryza sativa</i>
Deadnettle, purple	<i>Lamium purpureum</i>	Sandbur, field	<i>Cenchrus pauciflorus</i>
Eclipta	<i>Eclipta alba</i>	Scouringrush	<i>Equisetum arvensis</i>
Foxtail, bristly	<i>Setaria verticillata</i>	Sesbania, hemp	<i>Sesbania exaltata</i>
Foxtail, giant	<i>Setaria faberi</i>	Shattercane	<i>Sorghum vulgare</i>
Foxtail, green	<i>Setaria viridis</i>	Shepherd's-purse	<i>Capsella bursa-pastoris</i>
Foxtail, robust purple	<i>Setaria viridis, var. robusta-purpurea</i>	Sicklepod	<i>Casia obtusifolia</i>
Foxtail, robust white	<i>Setaria viridis, var. robusta-alba</i>	Sida, prickly	<i>Sida spinosa</i>
Foxtail, yellow	<i>Pennisetum glaucum</i>	Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>
Galinsoaga	<i>Galinsoaga parviflora</i>	Smartweed, ladythumb	<i>Polygonum persicaria</i>

Goosegrass	<i>Eleusine indica</i>		Smartweed, pale	<i>Polygonum lapathifolium</i>
Henbit	<i>Lamium amplexicaule</i>		Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Jimsonweed	<i>Datura stramonium</i>		Sowthistle, annual	<i>Sonchus oleraceus</i>
Johnsongrass	<i>Sorghum halapensis</i>		Sowthistle, perennial	<i>Sonchus arvensis</i>
Kochia	<i>Kochia scoparia</i>		Speedwell, corn	<i>Veronica arvensis</i>
Lambsquarters, common	<i>Chenopodium album</i>		Sprangletop, red	<i>Leptochloa filiformis</i>
Lettuce, prickly	<i>Lactuca serriola</i>		Spurge, toothed	<i>Euphorbia serrata</i>
Mallow, Venice	<i>Hibiscus trionum</i>		Starbur, bristly	<i>Acanthospermum hispidum</i>
Marestail (Horseweed)	<i>Conyza canadensis</i>		Sunflower, common	<i>Helianthus annuus</i>
Medic, black	<i>Medicago lupulina</i>		Thistle, Russian	<i>Salsola kali</i>
Millet, wild proso	<i>Panicum miliaceum</i>		Velvetleaf	<i>Abutilon theophrasti</i>
Morningglory, entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>		Violet, field	<i>Viola arvensis</i>
Morningglory, ivyleaf	<i>Ipomoea hederacea</i> var. <i>hederacea</i>		Waterhemp, common	<i>Amaranthus rudis</i>
Morningglory, pitted	<i>Ipomoea lacunosa</i>		Waterhemp, tall	<i>Amaranthus tuberculatus</i>
Mustard, wild	<i>Sinapis arvensis</i>		Witchgrass	<i>Panicum capillare</i>
Nightshade, black	<i>Solanum nigrum</i>			

## 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 CORPORATION ("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.

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**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.

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We create chemistry



**APPENDIX**

If registered in the states listed in the table below, Alite 27 Herbicide is allowed for use on GT27 or isoxaflutole-resistant soybean in the following counties (NOTE TO REVIEWER – table to be updated based on list of counties with no co-occurrence):

**Table of Counties for Alite 27 Herbicide**

Arkansas	Hempstead Lafayette	
Colorado	Prowers	
Georgia	Atkinson Berrien Clinch Echols	Evans Lanier Lowndes
Indiana	Adams Bartholomew Blackford Boone Brown Clay Clinton Daviess Delaware Dubois Fayette Fountain Grant Greene Hamilton Hancock Hendricks Henry Howard Huntington Jackson Jay Johnson	Lawrence Madison Marion Martin Monroe Montgomery Morgan Orange Owen Parke Pike Putnam Randolph Rush Scott Shelby Spencer Tipton Union Warrick Wayne Wells Whitley
Kansas	Cheyenne Clay Cloud Decatur Dickinson Ellis Finney Geary Gove Graham Grant Greeley Hamilton Hodgeman Jewell Kearny Lane Lincoln Logan Mitchell Morton	Ness Norton Osborne Ottawa Phillips Pottawatomie Rawlins Riley Rooks Saline Scott Sheridan Sherman Smith Stanton Sumner Thomas Trego Wallace Wichita

*(continued)*

**Table of Counties for Alite 27 Herbicide** *(continued)*

Kentucky	Breathitt Daviess Elliott Floyd Hancock Hopkins Johnson Knott	Leslie Magoffin McLean Morgan Muhlenberg Ohio Perry
Louisiana	Avoyelles Claiborne Concordia East Baton Rouge East Feliciana Iberville Lincoln	Pointe Coupee St. Landry Webster West Baton Rouge West Carroll West Feliciana
Michigan	Baraga Clare Gogebic Houghton	Iron Mecosta Osceola
Minnesota	Anoka Benton Carver Chisago Crow Wing Isanti	Kanabec Mille Lacs Morrison Sherburne Wadena Wright
Missouri	Buchanan Caldwell Carroll Clinton DeKalb Shelby	
Mississippi	Adams Franklin Montgomery Wilkinson	
Montana	Fallon Musselshell Treasure	
North Carolina	Bertie Chowan Gates Hertford Pasquotank Perquimans	

*(continued)*



**Table of Counties for Alite 27 Herbicide (continued)**

North Dakota	Bowman Cavalier Hettinger	Slope Steele Walsh
Nebraska	Chase Dundy Hitchcock Red Willow	
New Mexico	Curry	
Ohio	Allen Auglaize Belmont Carroll Columbiana Crawford Darke Guernsey Hancock Harrison Lake Mercer	Monroe Morgan Morrow Muskingum Noble Preble Richland Shelby Van Wert Washington Wyandot
Oklahoma	Bryan Cimarron Cotton Creek Greer Harmon Jackson	Jefferson Love Marshall Osage Pawnee Tillman
Pennsylvania	Elk McKean	
South Dakota	Aurora Beadle Brown Brule Buffalo Clark	Codington Hand Harding Jerauld Spink
Tennessee	Dyer Lake Lauderdale Obion Weakley	
Texas	Andrews Armstrong Bailey Bosque Briscoe Brown Camp Carson Castro Childress Cochran Collin	Collingsworth Comanche Cooke Coryell Dallam Dallas Deaf Smith Delta Denton DeWitt Donley Ector

(continued)

**Table of Counties for Alite 27 Herbicide (continued)**

Texas (continued)	Ellis	Mills
	Fannin	Montague
	Franklin	Moore
	Gaines	Morris
	Glasscock	Oldham
	Gray	Parmer
	Grayson	Potter
	Hall	Rains
	Hamilton	Randall
	Hansford	Reagan
	Hardeman	Roberts
	Hartley	Rockwall
	Hemphill	Sherman
	Hopkins	Somervell
Hunt	Swisher	
Hutchinson	Tarrant	
Irion	Titus	
Johnson	Upton	
Karnes	Van Zandt	
Kaufman	Wheeler	
Lamar	Winkler	
Martin	Wise	
McCulloch	Wood	
Midland	Yoakum	
Virginia	Bedford Charlottesville Danville	Franklin Portsmouth Suffolk
Wisconsin	Barron Buffalo Chippewa Clark Eau Claire Florence Forest Iron Langlade	Lincoln Menominee Oneida Polk Price Rusk Taylor Trempealeau Vilas
West Virginia	Doddridge Gilmer Marshall Pleasants	Ritchie Tyler Wirt Wood