

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 27, 2021

Elaine Bauer Crop Protection Regulatory Specialist Corteva Agriscience LLC 9330 Zionsville Road Indianapolis, IN 46268

Subject: Registration Review Label Mitigation for Cyhalofop-butyl

Product Name: CLINCHER SF

EPA Registration Number: 62719-357 Application Date: August 16, 2019

Decision Number: 554289

Dear Ms. Bauer:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Cyhalofop-butyl Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently

Page 2 of 2 EPA Reg. No. 62719-357 Decision No. 554289

approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Marisa Wright by phone at (703) 347-0463, or via email at wright.marisa@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

(Base label):

CYHALOFOP-BUTYL GROUP 1 HERBICIDE

# Clincher® SF

#### **HERBICIDE**

# For selective postemergence grass weed control in rice

Contains 2.38 lb of active ingredient per gallon. Contains petroleum distillates.

# Keep Out of Reach of Children

# WARNING AVISO

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.)

# **Precautionary Statements**

### **Hazards to Humans and Domestic Animals**

Causes Substantial, But Temporary Eye Injury • Causes Skin Irritation • Harmful If Swallowed

Do not get in eyes or on skin or clothing.

### Personal Protective Equipment (PPE)

#### Applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton ≥14 mils
- · Chemical-resistant footwear plus socks
- Protective eyewear (goggles, face shield or safety glasses)

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

# **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.

# **User Safety Recommendations**

Users should:

- · Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# ACCEPTED

May 27, 2021

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 62719-357

#### First Aid

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 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 swallowed:** Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

**Note to Physician:** Contains petroleum distillate - vomiting may cause aspiration pneumonia. No specific antidote. Provide supportive care. Treatment should be based on physician's judgment in response to reactions of the patient.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-992-5994 for emergency medical treatment information.

### **Environmental Hazards**

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark except when treating rice fields as specified in this product label. Drift from ground or aerial applications is likely to result in damage to sensitive aquatic organisms in water bodies adjacent to the treatment area. Do not contaminate water when disposing of equipment wash waters or rinsate.

**Surface Water:** This chemical can contaminate surface water through spray drift from aerial and ground application equipment. Treated rice paddy water can contaminate surface water through accidental release or overflow, or by deliberate release due to normal growing practices, including interim or final release of flood water at harvest

**Groundwater:** This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**Non-Target Organism Advisory Statement:** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

# **Physical or Chemical Hazards**

Combustible. Do not use or store near heat or open flame.

#### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

#### (Storage and Disposal for rigid containers 5 gal or less)

#### Storage and Disposal

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

Pesticide Storage: Store in cool dry place in original container.

**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:** Nonrefillable 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.

#### (Storage and Disposal for refillable rigid containers larger than 5 gal)

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**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Cleaning 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 clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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Refer to inside of label booklet for additional precautionary information including First Aid and Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

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(Booklet cover; shipping container):

CYHALOFOP-BUTYL GROUP 1 HERBICIDE

# Clincher® SF

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In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-357 EPA Est. \_\_\_\_\_

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Produced for Corteva Agriscience LLC 9330 Zionsville Road Indianapolis, IN 46268

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(Booklet page 1 through end):

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aquatic organisms in water bodies adjacent to the treatment area. Do not contaminate water when disposing of equipment wash waters or rinsate.

**Surface Water:** This chemical can contaminate surface water through spray drift from aerial and ground application equipment. Treated rice field water can contaminate surface water through accidental release or overflow, or by deliberate release due to normal growing practices, including interim or final release of flood water at harvest

**Groundwater:** This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**Non-Target Organism Advisory Statement:** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

### **Physical or Chemical Hazards**

Combustible. Do not use or store near heat or open flame.

#### **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

# **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton ≥14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles, face shield or safety glasses)

#### Storage and Disposal

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

Pesticide Storage: Store in cool dry place in original container.

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

# Nonrefillable containers 5 gallons or less:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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

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#### Refillable containers 5 gallons or larger:

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning 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 clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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#### **Product Information**

Clincher® SF herbicide is a postemergence herbicide for selective control of grass weeds in drilled and water seeded rice. A spray volume of 10 gallons or more per acre (gpa) and uniform coverage are required for optimum performance. Clincher SF is rainfast within 2 hours after application and has no preemergence or soil residual activity. Only actively growing grass weeds emerged at the time of application are controlled. Clincher SF will not control broadleaf weeds or sedges. The product may also be applied for control of susceptible grass weeds in ratoon rice up to 60 days before harvest.

#### **Use Precautions**

- Reduced weed control may result if application of Clincher SF is made to grass weeds under stress from prior herbicide applications, preventing active growth. To help prevent reduced control, delay the application of Clincher SF until grass weeds resume active growth.
- If applied to heading grass weeds, heavy weed densities and/or previously untreated areas (salvage treatment), only partial control or suppression should be expected from Clincher SF. Regrowth of these grass weeds may occur.
- · Clincher SF does not control ACC'ase resistant weeds.

#### **Use Restrictions**

- Preharvest Interval: Do not apply within 60 days of rice harvest.
- Do not apply more than 15 fl oz of Clincher SF per acre in a single application. Do not make more than 2 applications of Clincher SF per year. Do not apply more than 25 fl oz of Clincher SF per acre per year. Sequential applications of Clincher SF must be made at least 10 days apart.
- Do not rotate treated land to crops other than rice for 3 months following application of Clincher SF.
- Do not fish or commercially grow fish, shellfish or crustaceans on acres treated with Clincher SF during the year of treatment.
- Do not apply Clincher SF if grass weeds are under drought or hydrogen sulfide stress.

- If the spray solution pH of Clincher SF is >8, a buffering agent should be used to lower the pH to <8.
- Always use clean water with spray mixes of Clincher SF. Do not use water containing rinsate from a previous spray solution, even at low concentrations, as this may reduce grass weed control from Clincher SF.
- Chemigation: Do not apply this product through any type of irrigation system.

# **Weed Resistance Management**

This product, which contains the active ingredient Cyhalofop-butyl, is a Group 1 herbicide based upon the mode of action classification system of the Weed Science Society of America.

The continued effectiveness of this product depends on the successful implementation of a weed resistance management program.

To aid in the prevention of developing weeds resistant to this product, users should:

- Scout fields before application to ensure herbicides and rates will be appropriate for the weed species and weed sizes present.
- Start with a clean field, using either a burndown herbicide application or tillage.
- If using post-emergence herbicides or tank mixes, control weeds early when they are relatively small.
- Apply full rates of Clincher SF for the most difficult to control weed in the field at the specified time to minimize weed escapes.
- Scout fields after application to detect weed escapes or shifts in control of weed species.
- Control weed escapes before they reproduce by seed or proliferate vegetatively.
- Report any incidence of non-performance of this product against a particular weed to your local company representative, local retailer, or county extension agent.
- Contact your local company 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. Tank mix
  products so that there are multiple effective modes of action for each target weed.
- If resistance is suspected, treat weed escapes with an herbicide having a mode of action other than Group 1 and/or use nonchemical methods to remove escapes, as practical, with the goal of preventing further seed production.
- Suspected herbicide-resistant weeds may be identified by these indicators:
  - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially
    if control is achieved on adjacent weeds;
  - A spreading patch of non-controlled plants of a particular weed species; and
  - Surviving plants mixed with controlled individuals of the same species.

Additionally, users should follow as many of the following herbicide resistance management practices as is practical:

- Use a broad spectrum herbicide with other mode of action as a foundation in a weed control program, if appropriate.
- Utilize sequential applications of herbicides with alternative modes of action.
- Rotate the use of this product with non-Group 1 herbicides.
- Avoid making more than two sequential applications of Clincher SF and any other Group 1 herbicides per year unless mixed with an herbicide with a different mode of action with an overlapping spectrum for the difficult-to-control weeds.
- Incorporate non-chemical weed control practices, such as mechanical cultivation, crop rotation, cover crops and weed-free crop seeds, as part of an integrated weed control program.
- Use good agronomic principles that enhance crop development and crop competitiveness.
- Thoroughly clean plant residues from equipment before leaving fields suspected to contain resistant weeds.
- Manage weeds in and around fields to reduce weed seed production.

# **Mixing Instructions**

**Use of Adjuvants** 

Use of an agriculturally approved crop oil concentrate or methylated seed oil at a minimum rate of 1 quart per acre must be used for all applications of Clincher SF. Read and follow all precautions on crop oil concentrate label.

#### Clincher SF - Alone

Fill spray tank to one-half (1/2) full with water. Start agitation. Add correct quantity of Clincher SF and adjuvant. Continue agitation while filling spray tank to required volume and during application.

#### **Clincher SF in Tank Mixes**

Continuous agitation is required for tank mixes. Sparger pipe agitators generally provide the best agitation in spray tanks.

Clincher SF may be applied in tank mix combination with labeled rates and timings of Grasp™ SC herbicide (penoxsulam), Pendimax® 3.3 herbicide (pendimethalin), Prowl (pendimethalin), Facet (quinclorac) or Command (clomazone) for early postemergence, preflood application in rice. When tank mixing, follow label directions, including application rates, use precautions and limitations on each respective label. State regulations may apply. Reduced grass weed control may result if Clincher SF is applied in tank mix combination with or immediately following other herbicides not listed above, especially if applied under conditions of plant stress and/or advanced grass weed growth stages. To avoid the potential of reduced grass weed control, apply Clincher SF to actively growing, non-stressed grass weeds at least 5 days before or 7 days after the application of herbicides not listed above.

**Mixing Order:** Always use clean water with spray mixes of Clincher SF. Do not use water containing rinsate from a previous spray solution, even at low concentrations, as this may reduce grass weed control from Clincher SF.

Fill the tank one-third (1/3) full with water. Start the agitation. Different formulation types should be added in the following order: dry flowables (DF), wettable powders (WP), aqueous suspensions (AS), flowables (F), or liquids (L). Allow each product type to completely disperse before adding another. Continue agitation and fill the spray tank to three-fourths (3/4) full, add the correct quantity of Clincher SF or other emulsifiable concentrates (EC) and mix thoroughly. Finally, add any solution (S) formulations or surfactant, agitate and finish filling. Maintain agitation during filling and during application. If spraying and agitation must be stopped before the tank is empty, suspended materials may settle to the bottom. It is important to resuspend all of the settled material before continuing application. A sparger agitator is particularly useful for this purpose.

Carefully follow all mixing instructions for each material added to the tank. Initial dispersion of dry or flowable formulations can be improved by mixing with a small amount of water (slurrying) and pouring the slurry through a 20 to 35 mesh wetting screen in the top of the spray tank. Line screens in the tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh).

# **Application Guidelines**

# **Ground Application**

Applying Clincher SF by ground application is not recommended.

#### **Avoiding Injury to Non-Target Plants**

**Avoid direct or indirect contact with non-target plants.** Do not apply near desirable vegetation such as corn, sugar cane, sudangrass, sorghum, grass grown for seed, millet and sod farms, and trees such as peaches and nectarines and other desirable crops, cereal and grass. Allow adequate distance between target area and desirable plants to minimize exposure (see Buffer Zones below for restriction). The following drift management requirements must be followed to avoid off-target drift movement from aerial applications.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

#### **Buffer Zones**

Buffer zones are defined as the distance between the application site and the sensitive crop. For aerial applications, follow recommendations in Spray Drift Management and Spray Drift Advisories sections, in addition to the recommended buffers, to minimize potential drift to off-target vegetation. Do not apply Clincher SF when wind speeds are less than 3 mph or greater than 10 mph. The potential for injury to non-target cereal and grass crops is less likely under conditions of advanced growth stages, low wind, and dry soil moisture conditions. The buffer zones listed below must be followed:

Sensitive Crop	Ground Restrictions (ft)	Aerial Restrictions	
non-target cereal and grass crops such as corn, sugar cane sudangrass, sorghum, grass grown for seed, millet, and sod farms.	50	150 feet	
commercial peach and nectarine orchards	660	<ul><li>2 miles if wind blowing from treatment area away from sensitive crop.</li><li>4 miles if wind blowing from treatment area toward sensitive crop.</li></ul>	

# **Spray Drift Management**

# **Aerial Applications**

- Do not release spray at a height greater than 10 feet above the ground or vegetative canopy unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds are less than 3 mph or greater than 10 mph at the application site.
- 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.
- Do not apply during temperature inversions.

#### **Ground Boom Applications**

- Apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds are greater than 10 mph at the application site.
- Do not apply during temperature inversions.

# **Spray Drift Advisories**

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

#### IMPORTANCE OF DROPLET SIZE

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

#### Controlling Droplet Size - Ground Boom

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

#### **Controlling Droplet Size - Aircraft**

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

#### **BOOM HEIGHT - Ground Boom**

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

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift.

#### **SHIELDED SPRAYERS**

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

#### **TEMPERATURE AND HUMIDITY**

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

#### **TEMPERATURE INVERSIONS**

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

#### **WIND**

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

#### **BOOMLESS 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 Timing**

Clincher® SF herbicide may be applied to rice from the 1 leaf stage up to 60 days before harvest. Within this application window, application timing is dependent upon cultural practices and optimum timing for weed species present. (See Application Rates and Weeds Controlled section.)

#### **Drill Seeded Rice**

**Preflood:** Clincher SF is recommended as a preflood application. Apply to grass weeds in the 1 to 4 leaf stage (see table below). Tank mixing recommendations are described below. Good soil moisture conditions (saturated soil) and actively growing grass weeds are essential for preflood applications. For this reason, levee grass weeds may not be fully controlled by Clincher SF. Ground application of Clincher SF is not recommended as weed control may be reduced.

Flushing of rice fields may be necessary prior to application if rice or grass weeds are moisture stressed. If a field is flushed, make sure the field is drained prior to treatment so that grass weeds are fully exposed. Clincher SF should be tank mixed with a residual grass control product to prevent additional grass weed germination after treatment (see Clincher SF in Tank Mixes section).

**Postflood:** Best results will be obtained from applications made within 7 to 10 days after flooding. Maintaining the flood at application is recommended so long as grass weeds are at least 70% exposed. If fields are drained at application, they should be re-flooded beginning 2 hours after application and within 24 to 48 hours to prevent germination of new weeds. Following application, it is important to maintain a flood of at least 2 to 4 inches

across the field to reduce the risk of grass weed regrowth. A permanent flood following application will give the best results. For this reason, levee grass weeds may not be fully controlled by Clincher SF.

For extremely heavy grass densities, a sequential application program of Clincher SF can be made at 15 fl oz per acre 7 to 10 days after permanent flood, followed by a second application of Clincher SF at the rate of 10 fl oz per acre between 10 and 14 days later.

If Clincher SF is applied as a postflood salvage treatment to previously untreated areas, to fields with previous failed herbicide applications, or areas of extremely high grass weed density, total control of labeled grass weeds should not be expected. Regrowth of these grass weeds may occur.

#### **Water Seeded Rice**

**Before permanent flood:** Allow grass weeds to germinate before application. Good soil moisture conditions (saturated soil) and actively growing grass weeds are essential. Residual water remaining in the field does not adversely affect grass weed control so long as grass weeds are at least 70% exposed. Ground application of Clincher SF is not recommended as weed control may be reduced. If fields are drained at application, they should be re-flooded beginning 2 hours after application and within 24 to 48 hours after application to prevent germination of new grass weeds.

**After permanent flood (postflood):** Maintain the flood at application so long as grass weeds are at least 70% exposed. Following application, it is important to maintain a flood of 2 to 4 inches across the field to reduce the risk of grass weed regrowth. A permanent flood following application provides the best results.

For extremely heavy grass densities, a sequential application program of Clincher SF can be made at 15 fl oz per acre 7 to 10 days after permanent flood, followed by a second application of Clincher SF at the rate of 10 fl oz per acre between 10 and 14 days later.

If Clincher SF is applied as a postflood salvage treatment to previously untreated areas, to fields with previous failed herbicide applications or areas of extremely high grass weed density, total control of labeled grass weeds should not be expected. Regrowth of these grass weeds may occur.

# Application Rates and Weeds Controlled (Arkansas, Florida, Louisiana, Mississippi, Missouri, Tennessee, and Texas)

#### **Drill Seeded Rice**

Common Name	Scientific Name	Application Rates of Clincher SF and Stage of Grass Weed Development	
Weeds Controlled		13.5 fl oz/acre	13.5 to 15 fl oz/acre <sup>1</sup>
Amazon (tighthead) sprangletop barnyardgrass bearded sprangletop broadleaf signalgrass fall panicum johnsongrass (seedling) junglerice red sprangletop	Leptochloa panicoides Echinochloa crus-galli Leptochloa fascicularis Brachiaria platyphylla Panicum dichotomiflorum Sorghum halepense Echinochloa colona Leptochloa filiformis	preflood up to 4 leaf	postflood, prior to grass weed heading
Weeds Suppressed			
goosegrass large crabgrass	Eleusine indica Digitaria sanguinalis		

<sup>&</sup>lt;sup>1</sup>If applied to heading grasses, heavy weed densities and/or previously untreated areas (salvage treatment), only partial control should be expected. Regrowth of these grass weeds may occur.

**Note:** Do not apply more than 15 fl oz in a single application or apply more than 25 fl oz per year in both the first and ration crops combined.

#### **Water Seeded Rice**

Common Name	Scientific Name	Application Rates of Clincher SF and Stage of Grass Weed Development	
Weeds Controlled		13.5 fl oz/acre	13.5 to 15 fl oz/acre <sup>1</sup>
Amazon (tighthead) sprangletop barnyardgrass bearded sprangletop broadleaf signalgrass fall panicum junglerice knotgrass <sup>2</sup> red sprangletop	Leptochloa panicoides Echinochloa crus-galli Leptochloa fascicularis Brachiaria platyphylla Panicum dichotomiflorum Echinochloa colona Paspalum distichum Leptochloa filiformis	preflood up to 4 leaf	mid- to-late tillering or branching, prior to grass weed heading
Weeds Suppressed			
brook paspalum perennial barnyardgrass Texas panicum water paspalum	Paspalum acuminatum Echinochloa polystachya Panicum texanum Paspalum hydrophilum		

<sup>&</sup>lt;sup>1</sup>If Clincher SF is applied as a postflood salvage treatment to previously untreated areas, to fields with previous failed herbicide applications, or areas of extremely high grass weed density, total control of labeled grass weeds should not be expected. Regrowth of these grass weeds may occur.

**Note:** Do not apply more than 15 fl oz in a single application or apply more than 25 fl oz per year in both the first and ration crops combined.

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If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation, of Remedies.

# **Warranty Disclaimer**

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It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Corteva Agriscience or the seller. Corteva Agriscience will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed by Corteva Agriscience. To the extent permitted by law, all such risks associated with non-directed use shall be assumed by buyer and/or user.

<sup>&</sup>lt;sup>2</sup>Knotgrass at 1 to 4 leaf stage can be controlled with 10 to 13.5 fl oz per acre.

#### **Limitation of Remedies**

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, tort, strict liability, or other legal theories), shall be limited to, at Corteva Agriscience's election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

To the extent permitted by law, Corteva Agriscience shall not be liable for losses or damages resulting from handling or use of this product unless Corteva Agriscience is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Corteva Agriscience be liable for consequential, incidental or special damages or losses.

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