

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 12, 2022

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: GF-3480

EPA Registration Number: 62719-700 Application Date: August 16, 2019

Decision Number: 554288

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

Page 2 of 2 EPA Reg. No. 62719-700 Decision No. 554288

If you have any questions about this letter, please contact Marisa Wright by phone at 202-566-2335, or via email at <a href="wright.marisa@epa.gov">wright.marisa@epa.gov</a>.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

(Base label):

FLORPYRAUXIFEN-BENZYL	GROUP	4	HERBICIDE
CYHALOFOP-BUTYL	GROUP	1	HERBICIDE

# **GF-3480**

#### **HERBICIDE**

with Rinskor™ active

For selective postemergence grass, sedge, and broadleaf weed control in rice in the states of Arkansas, Florida, Louisiana, Mississippi, Missouri, Tennessee, and Texas

Active Ingredient:

Contains 0.17 lb florpyrauxifen-benzyl and 0.83 lb cyhalofop per gallon.

# ACCEPTED

Jan 12, 2022

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

EPA Reg. No. 62719-700

# Keep Out of Reach of Children

# **CAUTION**

# **Precautionary Statements**

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

## **Causes Moderate Eye Irritation**

Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

# Personal Protective Equipment (PPE)

#### Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Shoes plus socks
- Protective eyewear
- Waterproof gloves

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

**Engineering Controls:** When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], 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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### 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.

**Note to Physician:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 day or night, for emergency treatment information.

#### **Environmental Hazards**

This product is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark except when treating rice fields as specified in this product label. Drift and runoff 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.

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

**Surface Water:** This product 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.

**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.

# **Agricultural Use Requirements**

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

#### Nonrefillable containers 5 gallons or less:

## **Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:** 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 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.

### Refillable containers larger than 5 gallons:

# Storage and Disposal

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

**Pesticide Storage:** Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:** 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 mix tank. Fill the container about 10% full with water. 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.

## Nonrefillable containers larger than 5 gallons:

# Storage and Disposal

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

**Pesticide Storage:** Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:** 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. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tan or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or 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.

Refer to the 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 not acceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

T4K	GF-3480	/ MSTR	/ Amend	IRRD and	I FR	/ 06-03-202	21

Page 4

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

EPA Reg. No. 62719-700

EPA Est. \_\_\_\_\_

™®Trademarks of Corteva Agriscience and its affiliated companies

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

NET CONTENTS \_\_\_\_\_

(Booklet cover / shipping container)

FLORPYRAUXIFEN-BENZYL	GROUP	4	HERBICIDE
CYHALOFOP-BUTYL	GROUP	1	HERBICIDE

# **GF-3480**

#### **HERBICIDE**

with Rinskor™ active

For selective postemergence grass, sedge, and broadleaf weed control in rice in the states of Arkansas, Florida, Louisiana, Mississippi, Missouri, Tennessee, and Texas

Contains 0.17 lb florpyrauxifen-benzyl and 0.83 lb cyhalofop per gallon.

# Keep Out of Reach of Children

# **CAUTION**

#### **Agricultural Use Requirements**

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

Refer to the 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 not acceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

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

EPA Reg. No. 62719-700 EPA Est. \_\_\_\_\_

™®Trademarks of Corteva Agriscience and its affiliated companies

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

NFT	CON	TFN'	rs -	
	COIN			

(Booklet page 1 through end):

# **Precautionary Statements**

# **Hazards to Humans and Domestic Animals**

# **CAUTION**

#### **Causes Moderate Eye Irritation**

Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

# **Personal Protective Equipment (PPE)**

#### Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- · Waterproof gloves

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

**Engineering Controls:** When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], 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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### 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.

**Note to Physician:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 day or night, for emergency treatment information.

#### **Environmental Hazards**

This product is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark except when treating rice fields as specified in this product label. Drift and runoff 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.

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

**Surface Water:** This product 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.

**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.

### **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
- · Waterproof gloves
- · Shoes plus socks
- Protective eyewear

## **Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

### 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 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.

#### Refillable containers larger than 5 gallons:

**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 mix tank. Fill the container about 10% full with water. 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.

## Nonrefillable containers larger than 5 gallons:

**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. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tan or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or 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.

#### **Product Information**

GF-3480 herbicide is a postemergence herbicide for selective control of susceptible grass, sedge and broadleaf weeds in rice. Susceptible weeds emerged at the time of application will be controlled. A minimum spray volume of 10 gallons per acre (gpa) applied either by air or ground application and uniform coverage are required for optimum performance. GF-3480 is rainfast within 2 hours after application.

Any crop stress or environmental factors which influence plant health may impact efficacy and crop tolerance. Such crop effects are transient and do not affect yield. Rice crops grown under adverse environmental conditions, such as extreme cold or heat, may express temporary crop injury when GF-3480 is applied including slight height reduction or leaf malformations. GF-3480 may be used on all rice varieties and hybrids, including herbicide tolerant varieties.

#### **Use Precautions**

- Poor weed control and rice crop injury may result from application of GF-3480 made to plants under stress from abnormally hot or cold weather; environmental conditions such as drought, hail damage, prior herbicide applications, or soils with high salt content.
- Re-infestation of some weeds may occur if a permanent flood is not established in a timely manner (5 days or sooner after application).
- Application of GF-3480 to fields which have been leveled (except water leveling) within 12 months prior to application may result in serious rice injury in areas that have been cut or filled.
- Reduced weed control may result if application of GF-3480 is made to grass weeds under stress from prior herbicide applications, preventing active growth. To help reduce control, delay the application of GF-3480 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 GF-3480.
- Regrowth of these grass weeds may occur.
- If the spray solution pH of GF-3480 is >8, a buffering agent should be used to lower the pH to <8.

#### **Use Restrictions**

- **Preharvest Interval:** Do not apply within 60 days of rice harvest.
- Do not make more than 1 application per year.
- Do not apply more than 20.5 fl oz of GF-3480 (0.133 lbs cyhalofop-butyl and 0.027 lbs florpyrauxifen-benzyl) per acre per year.
- Do not apply to ratoon rice.
- Do not rotate treated land to crops other than rice for 3 months following application.
- Do not apply where runoff or irrigation water may flow directly onto agricultural land.
- Do not tank mix GF-3480 with malathion or methyl parathion. Do not make an application of malathion or methyl parathion within 7 days of an application of GF-3480. See additional tank mix restrictions below.
- Do not apply GF-3480 directly to, or otherwise permit GF-3480 to come into contact with carrots, cotton, soybeans, grapes, tobacco, vegetable crops, flowers, ornamental shrubs or trees, or other desirable broadleaf plants, as serious injury may occur. Do not permit spray mists containing GF-3480 to drift onto desirable broadleaf plants.
- Do not fish or commercially grow fish, shellfish or crustaceans on treated acres during the year of treatment with GF-3480.
- Do not allow tank mixes of GF-3480 to sit overnight. See additional tank mix restrictions below.
- Do not overlap or double spray ends of fields.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not use on wild rice.
- Do not mix with products that contain propanil.
- Always use clean water with spray mixes of GF-3480. Do not use water containing rinsate from a
  previous spray solution, even at low concentrations, as this may reduce grass weed control form GF3480.
- Do not apply GF-3480 if grass weeds are under drought or hydrogen sulfide stress.
- Do not use organosilicone surfactants in spray mixtures of this product.
- Do not use treated water for any form of irrigation.
- Do not use treated water for hydroponic farming.
- Make applications in a minimum of 10 gallons per acre (GPA) for ground and aerial applications.
- Do not compost any plant material from treated area.
- To minimize potential exposure in compost, do not allow livestock to drink treated water.
- Do not apply to salt/brackish water.

# **Mixing Instructions**

#### **Use of Adjuvants**

Additional adjuvant is not required with GF-3480.

#### GF-3480 - Alone

Fill spray tank to one-half full with water. Start agitation. Add correct quantity of GF-3480. Continue agitation while filling spray tank to required volume and during application.

#### GF-3480 - Tank Mixes

DO NOT TANK MIX ANY PESTICIDE PRODUCT WITH THIS PRODUCT without first referring to the following website for the specific product: www.3480tankmix.com. This website contains a list of active ingredients that are currently prohibited from use in tank mixture with this product.

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

#### **Tank Mixing Restrictions:**

Only use products in tank mixture with this product that: 1) are registered for the intended use site, application method and timing; 2) are not prohibited for tank mixing by the label of the tank mix product; and 3) do not contain one of the prohibited active ingredients listed on www.3480tankmix.com website.

Applicators and other handlers (mixers) must access the website within one week prior to application in order to comply with the most up-to-date information on tank mix partners.

Do not exceed specified application rates for respective products or maximum allowable application rates for any active ingredient in the tank mix.

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

Always perform a jar test to ensure the compatibility of products to be used in tank mixture.

When mixing with products that recommend additional adjuvant the total adjuvant need may partially or totally be met with GF-3480. Excess adjuvant may result in rice injury and reduced efficacy.

Do not mix GF-3480 with products that contain propanil.

**Tank Mix Compatibility Testing:** When tank mixing GF-3480 with other permitted materials, a compatibility test (jar test) using relative proportions of the tank mix ingredients should be conducted prior to mixing ingredients in the spray tank. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately one-half (1/2) hour. If the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

**Mixing Order:** 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 tank to three-fourths (3/4) full, add the correct quantity of GF-3480 and mix thoroughly. Finally, add any solution (S) formulations. 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. Do not allow tank mixes to set overnight.

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).

#### **Clean-Out Procedures for Spray Equipment**

- 1. Drain any remaining spray mixture from the application equipment, then wash out tank, boom, and hoses with clear water. Drain again.
- 2. Hose down the interior surfaces of the tank while filling the tank 1/2 full of water.
- 3. Add commercial tank cleaner, such as household ammonia, at a rate of 1 gallon per 100 gallons of water. Recirculate for 10 20 minutes and spray out the mixture through the boom.
- 4. Remove all spray nozzles and screens and clean separately.
- 5. If spray equipment will be used for pesticide application to crops sensitive to GF-3480, repeat steps 1 through 3.
- 6. Thoroughly clean exterior surfaces of spray equipment.

Rinsate may be disposed of onsite according to label use directions or at an approved waste disposal facility. Reduced results may occur if water containing soil is used, such as visibly muddy water or water from ponds and ditches that is not clear.

#### **Susceptible Plants**

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings. Spray drift may damage or render crops unfit for sale, use or consumption. Small amounts of spray drift that may not be visible may injure susceptible broadleaf plants. **Before making an application**, **please refer to your state's** 

sensitive crop registry (if available) to identify any commercial specialty or certified organic crops that may be located nearby.

Do not apply when wind is blowing toward adjacent cotton, carrots, soybeans, corn, grain sorghum, wheat, grapes, tobacco, vegetable crops, flowers, ornamental shrubs or trees, or other desirable broadleaf plants.

# **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 coarse or coarser spray (according to ASABE S572.1) at spray boom pressure no greater than 30 psi.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds are less than 2 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 3 feet above the ground or crop canopy.
- Applicators are required to use a coarse 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.

# **Application Instructions**

Where states have more stringent regulations, they should be observed.

#### **Environmental Conditions and Herbicidal Activity of GF-3480**

Factors for effective weed control with GF-3480 include proper application rate, weed size, daytime and nighttime temperatures, and soil moisture prior to and following application. Best weed control results are obtained when GF-3480 is applied to actively growing weeds, when daytime and nighttime temperatures are warm (60°F or more), and soil moisture is adequate to support active weed growth prior to and following application. If weeds are under drought stress, it is recommended to delay application until more favorable conditions resume. Application when weeds are larger than the recommended size (see recommended weed size in Weed Control Table) for control may result in only partial control.

- GF-3480 is rainfast in 2 hours.
- Applications made immediately prior to, during, or immediately following periods of large day/night temperature fluctuations or where daytime and nighttime temperatures do not exceed 60°F may decrease weed control and increase crop injury.
- Poor weed control and crop injury may result from application of GF-3480 made to plants under stress from abnormally hot or cold weather; environmental conditions such as drought, or hail damage, prior herbicide applications or soils with high salt content.
- Establishing permanent flood < 5 days after application of GF-3480 can benefit weed control.</li>

## **Aerial Application**

Apply in a spray volume of 10 gpa or more when applying by air. See Spray Drift Management and Spray Drift Advisories sections.

**Avoid direct or indirect contact with non-target plants.** Do not apply near desirable vegetation such as cotton, carrots, beans, grapes, tobacco, vegetable crops, flowers, ornamental shrubs or trees, commercial peach and nectarine orchards, or other desirable broadleaf plants, corn, grain sorghum, wheat, cereal and other grass crops such as sugar cane sudangrass, grass grown for seed, millet, and sod farms. and other desirable crops. Allow adequate distance between target area and desirable plants to minimize exposure (See Buffer Zones below for restriction).

#### **Buffer Zones**

The active ingredient cyhalofop can damage certain sensitive crops, therefor the following buffers must be observed when applying this product. Buffer zones are defined as the distance between the application site and the sensitive crop. For aerial applications, follow mandatory Spray Drift Management section and recommendations under Spray Drift Advisories section, in addition to the recommended buffers, to minimize potential drift to off-target vegetation. Do not apply GF-3480 when wind speeds are less than 2 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>

#### **Ground Application**

Apply in a spray volume of 10 gpa or more when applying by ground. See Spray Drift Management and Spray Drift Advisories sections.

## **Application Timing**

GF-3480 herbicide may be applied to rice from 2 leaf stage (drill-seeded rice or water-seeded rice) with no exposed roots up to 60 days before harvest. Refer to weed control table for application timing and weed size information. Do not apply if crop or weeds are under drought stress.

#### Water-Seeded Rice:

Fields must be partially drained to expose weeds prior to application. Residual water remaining in the field does not adversely affect weed control so long as weeds are at least 70% exposed. For delayed flood application, do not allow excessive drying of the soil which may cause the weeds to become drought stressed, resulting in unacceptable weed control. For best results, soils should be moist at application and maintain good soil moisture after application by flushing or rainfall until establishment of permanent flood. If flushing following an application, take steps necessary to ensure all water remains in the field. After an application of GF-3480 to a partially drained field with standing water present over the entire field, wait at least 3 hours before beginning the establishment of the permanent flood.

#### **Drill-Seeded Rice:**

GF-3480 is recommended as a preflood application. Adequate soil moisture for actively growing weeds is essential for preflood applications. Flushing of rice fields may be necessary prior to application if rice or weeds are moisture stressed. Residual water remaining in the field does not adversely affect weed control as long as weeds are at least 70% exposed. For best results, soils should be moist at application and maintain good soil moisture after application by flushing or rainfall until establishment of permanent flood. If flushing following an application, take steps necessary to ensure all water remains in the field. Re-infestation of some weeds may occur if a permanent flood is not established in a timely manner (5 days or sooner after application).

**Postflood:** Prior to application, the flood water must be lowered to expose at least 70% of the weed foliage. A shallow flood depth in the field (1 to 2 inches deep) will not adversely affect weed control. For best results, reestablishment of normal flood depth should begin within 3 hours after application to prevent germination of new weeds.

If GF-3480 is applied as a salvage treatment (e.g., heavy weed infestations, headed weeds, failure of previous herbicide applications, and/or previously untreated areas), it should be considered an emergency salvage treatment. Good control of labeled weeds should not be expected. Regrowth of treated weeds may occur.

# **Resistance Management**

GF-3480 contains two active ingredients with different modes-of-action. Cyhalofop-butyl is an inhibitor of ACCase (WSSA Group 1; HRAC Group A) and florpyrauxifen-benzyl is classified as an auxin herbicide (WSSA Group 4; HRAC Group O). Weed populations may develop biotypes that are resistant to different herbicides with the same mode of action. If herbicides with the same mode of action are used repeatedly in the same field,

resistant biotypes may eventually dominate the weed population and may not be controlled by these products. Other resistance mechanisms, such as enhanced metabolism, may also exist and may cause reduced weed control. The mode of action of florpyrauxifen-benzyl on grass species is distinct from quinclorac (Facet) a Group 4 and Group 26 herbicide and there is no known cross resistance between existing populations of barnyardgrass resistant to quinclorac.

This product should be used as part of an Integrated Pest Management (IPM) program that may include biological, cultural, and chemical practices aimed at preventing economic pest damage. Application of this product should be based on appropriate IPM and resistance management strategies and practices that delay or reduce the development of herbicide-resistant weed biotypes. Such practices include, but are not limited to, field scouting, use of weed free crop seed, proper water management, correct weed pest identification, following rotational practices outlined on pesticide labels, and treating when target weed populations are at the correct stage and economic thresholds for control.

To delay development of herbicide resistance, the following practices are recommended:

- Alternate use of products containing Rinskor with other products with different mechanisms of action.
- GF-3480 can be tank mixed or used sequentially with other approved products to broaden the spectrum of weed control, provide multiple modes of action and control weeds that GF-3480 does not control.
- Herbicides should be used based on an IPM program.
- Monitor treated areas and control escaped weeds.
- Contact local extension or crop advisor for IPM and resistance management information.

# **Application Rates and Weeds Controlled or Suppressed**

At a rate of 20.5 fl oz/acre the following weeds are either controlled or suppressed:

Common Name	Scientific Name	Controlled (C) or Suppressed (S)	Maximum Growth Stage
barnyardgrass <sup>1</sup>	Echinochloa crus-galli	С	3 tiller
broadleaf signalgrass <sup>1</sup>	Urochloa platyphylla	С	5 leaf
junglerice <sup>1</sup>	Echinochloa colona	С	3 tiller
tighthead sprangletop	Leptochloa panicoides	S	2 tiller
rice flatsedge1	Cyperus iria	С	6 leaf
purple nutsedge <sup>1,2</sup>	Cyperus rotundus	С	5 leaf
yellow nutsedge <sup>1,2</sup>	Cyperus esculentus	С	5 leaf
Smallflower umbrellasedge <sup>1</sup>	Cyperus difformis	С	6 leaf
alligatorweed	Alternanthera philoxeroides	С	12" runners
Ammannia (red stem)	Ammannia coccinea	С	8"
Arrowhead / bulltongue / grassy arrowhead	Sagittaria spp.	С	10"
common ragweed	Ambrosia artemisiifolia	С	8"
ducksalad	Heteranthera limosa	С	4 leaf
eclipta	Eclipta prostrate	С	6"
falsepimpernel, low	Lindernia dubia	О	6"
hemp sesbania	Sesbania herbacea	С	24"
horseweed	Conyza spp.	С	6"
jointvetch, Indian	Aeschynomene indica	С	12"
jointvetch, northern	Aeschynomene virginica	С	12"
Palmer amaranth <sup>3</sup>	Amaranthus palmeri	С	8"
pitted morningglory <sup>4</sup>	Ipomoea lacunosa	С	8"
redroot pigweed	Amaranthus retroflexus	С	8"

redweed	Melochia corchorifolia	С	8"
roundleaf mudplantain	Heteranthera reniformis	С	6"
spreading dayflower	Commelina diffusa	С	6"

<sup>&</sup>lt;sup>1</sup>Includes ALS-, propanil- and quinclorac-resistant species.

- Do not make more than 1 application per year.
- Do not apply more than 20.5 fl oz of GF-3480 (0.133 lbs cyhalofop-butyl and 0.027 lbs florpyrauxifen-benzyl) per acre per year.
- Do not apply to ratoon rice.

# **Terms and Conditions of Use**

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**

Corteva Agriscience warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent permitted by law, Corteva Agriscience MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

### Inherent Risks of Use

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.

## 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.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Corteva Agriscience or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

™®Traden	narks of	Corteva <i>i</i>	Agriscience	and its	affiliated	companies
EPA accep	ted/	/				

<sup>&</sup>lt;sup>2</sup>Greatest efficacy can be achieved when applied 5 days or sooner to establishment of permanent flood.

<sup>&</sup>lt;sup>3</sup>Includes ALS- and glyphosate-resistant species.

<sup>&</sup>lt;sup>4</sup>Morningglory species other than pitted morningglory are not controlled by GF-3480.