

QUINCLORAC	GROUP	4	29	HERBICIDE
BISPYRIBAC-SODIUM	GROUP	2		HERBICIDE



**ACTIVE INGREDIENT:**

By Wt.

* Quinclorac.....	17%
**Bispyribac-sodium .....	1.37%
<b>OTHER INGREDIENTS:</b> .....	<b>81.63%</b>
<b>TOTAL:</b> .....	<b>100.0%</b>
* 3,7-dichloro-8-quinolinecarboxylic acid	
**Sodium 2,6-bis[(4,6-dimethoxyprimidin-2-yl)oxy]benzoate	

Contains 0.12 lb/gal of bispyribac-sodium and 1.5 lb/gal of quinclorac

**For control of barnyardgrass / junglerice and certain annual grasses and broadleaf weeds in rice**

**KEEP OUT OF REACH OF CHILDREN**

**DANGER/PELIGRO**

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.)

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by the poison control center or doctor.</li> <li>Do not give anything 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 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>Note to Physician:</b> Probable mucosal damage may contraindicate the use of gastric lavage	

## EMERGENCY INFORMATION

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

FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:

For Medical Emergencies phone: .....1-888-681-4261

For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC® .....1-800-424-9300

For Product Use Information phone: AMVAC® .....1-888-462-6822

See booklet for additional Precautionary Statements and Directions for Use.

EPA Reg. No. 5481-685

EPA Est. No. \_\_\_\_\_

Net Contents: \_\_\_\_\_



AMVAC Chemical Corporation  
4695 MacArthur Court, Suite 1200  
Newport Beach, CA 92660 U.S.A.  
1-888-462-6822

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## DANGER/PELIGRO

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Wear protective eyewear, such as goggles, face shield, or safety glasses. 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. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, or Viton®  $\geq$  14 mils
- Protective eyewear, such as goggles, face shield or safety glasses
- Shoes plus socks

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 exist, 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.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- 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 STATEMENT

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.

### ENVIRONMENTAL HAZARDS

This product is toxic to non-target plants. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash water.

### SURFACE WATER ADVISORY STATEMENT

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of bispyribac-sodium from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

### GROUNDWATER ADVISORY STATEMENT

This product contains chemicals that have properties and characteristics associated with chemicals detected in groundwater. The use of this product where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Keep out of lakes, ponds, and streams. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark, except as specified in this label for use in rice. DO NOT contaminate water by cleaning of equipment or disposal of rinsate.

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

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

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific 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:

- Long-sleeved shirt and long pants

- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils
- Protective eyewear, such as goggles, face shield, or safety glasses
- Shoes plus socks

## I. PRODUCT INFORMATION

Rindé contains both bispyribac-sodium, a postemergence systemic herbicide (ALS, Group 2), and quinclorac, a preemergence and postemergence systemic herbicide (auxin mimic, Group 4), for control of emerged barnyardgrass / junglerice and certain other annual grasses and broadleaf weeds in dry and water seeded rice (except California). Apply to small, actively growing weeds before weeds exceed the size listed for weeds listed in Table 3.

Bispyribac-sodium is a postemergence systemic herbicide with no residual soil activity which works by inhibiting the ALS (acetolactate synthase) enzyme in the weed. Susceptible weed growth will cease and exhibit chlorosis (yellow color) within 3 to 7 days after application; will exhibit necrosis (brown desiccated foliage) within 7 to 14 days after application; and will experience death of stem and foliage 14 to 21 days after application.

Quinclorac is a preemergence and postemergence systemic herbicide with plant uptake through the plant's foliage and roots. Susceptible weeds will show signs of twisting, stunting, reddening, and chlorosis. Death may take up to three weeks in annual weeds.

Occasionally, some temporary injury to rice may be observed. This will not affect yields. Any injury to rice can be mitigated by top dressing with fertilizer (which will hasten injury recovery).

Rindé applications must also include specified spray additives. Refer to Additives and Mixing Order Instructions (Section III and IV).

<b>QUINCLORAC</b>	<b>GROUP</b>	<b>4</b>	<b>29</b>	<b>HERBICIDE</b>
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## RESISTANCE MANAGEMENT

Herbicide resistance has become an important management focus to maximize weed control. Weeds have developed resistance to many herbicide modes of action. Rindé contains both a Group 2 (bispyribac-sodium) and a Group 4 (quinclorac) herbicide. Any weed population may contain plants naturally resistant to Group 2 and/or Group 4 herbicides. Resistant plants may dominate weed population if these group 2 and 4 herbicides are used repeatedly in the same fields. It is recommended to follow effective resistance-management strategies.

Follow as many as possible of the following recommendations to delay herbicide resistance in weeds:

- Rotate the use of Rindé or other Group 2 and 4 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.

- After applying herbicides, scout fields to determine the effectiveness of herbicides and other weed control cultural or mechanical practices, paying particular attention to identify weed profile shift or resistance. 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.
- Use full listed application rate and follow label instructions for application timing (particularly for effectiveness against resistant weed species).
- 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.
- Any herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Other factors, such as enhanced weed metabolism, may also occur and contribute to weed resistance. Consult your state cooperative extension service, professional consultants, or other qualified authorities for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report any suspected resistance to your AMVAC representative or at 1-888-462-6822.

## II. APPLICATION AND MIXING INSTRUCTIONS

### SPRAY DRIFT MANAGEMENT

#### SPRAY DRIFT AERIAL APPLICATIONS

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use ½ swath displacement upwind of the downwind edge of the field.
- Do not apply when wind speeds exceed 8 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.
- Do not apply if air temperature is more than 90° F.

When application with ground spray equipment is not possible, application by aircraft is acceptable if the aerial applicator understands the risks associated with accidental spray drift from aerial application.

#### SPRAY DRIFT GROUND BOOM APPLICATIONS

- Users must only apply with the release height recommended by the manufacturer, but no more than 30-inches above the ground or crop canopy.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 mph at the application site.

- Do not apply during temperature inversions.

**SPRAY DRIFT  
BOOM-LESS GROUND APPLICATIONS**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 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.

1. Where states have more stringent regulations, they must be observed.
2. Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.
3. When making tank mixture application follow the most restrictive label directions, including application buffer zones, of each product in the mixture.

**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 pressures 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. Use only nozzles spaced up to 20-inches apart that produce uniform spray patterns and thorough coverage. DO NOT use controlled droplet applicator (CDA) nozzles.

**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.

**Boom-less Ground Applications:** setting nozzles at the lowest effective height will help reduce the potential for spray drift.

**Wind**

Drift potential is lowest between wind speeds of 2 to 10 mph. 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. DO NOT apply at wind speeds below 2 mph because of variable wind direction and high inversion potential.

## 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.

## Sensitive Areas

Apply this pesticide only 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).

## SPRAY COVERAGE

Rindé should be applied with ground equipment whenever possible. Rindé may also be applied using aerial equipment in certain states (see below). Read and follow all drift management information on this label when applying by air.

For optimum efficacy, apply the spray solution in a manner that promotes maximum coverage, i.e. proper water volume, correct spray nozzles, optimum weed size, etc. DO NOT use flood jet nozzles, controlled droplet application equipment, or air-assisted spray equipment.

Rindé can be applied:

- By ground equipment with a total spray volume of 15 gallons or greater per acre
- By aircraft, with a total spray volume of 5 gallons or greater per acre

If spray volume is not sufficient, weed control can be compromised. If foliage canopy is heavy, use enough spray volume to reach and adequately cover weeds. Any factor that unfavorably affects weed coverage can result in compromised weed control. Buffer the application water if the pH is above 7.0 or below 6.0. Do not use turbid, high sediment or ditch water.

Rindé may be applied by air in the following states: **AR, LA, MS, MO, TX.**

**AR** and **TX** are subject to further geographic prohibitions for applications as listed in Table 1.

**Table 1 AR and TX Aerial Application Restrictions**

States where Aerial Application is Permitted	Geographic Prohibitions on Aerial Application*	Geographic Prohibitions on all Applications <sup>1</sup>
Arkansas	The area of Poinsett County one mile west of Highway No. 1 to two miles west of Highway No. 1 and one-mile east of Highway No. 163 to Ditch No. 10 from the Craighead/Poinsett County line to the Cross/Poinsett County line	One mile west of Highway No. 1 to one mile east of Highway No. 163 from the Craighead/Poinsett County line to the Cross/Poinsett County line.

Texas	Bandera, Coke, El Paso, Freestone, Hays, Hudspeth, Jim Wells, Kerr, Kimble, Kleberg, Leon, Live Oak, Madison, Mitchell, Nueces, Pecos, Robertson, Runnels, San Patricio, Starr, Uvalde, Washington	None
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\*Because of the possible presence of endangered plant species as well as additional state restrictions, aerial application is NOT permitted in the geographic areas listed.

<sup>1</sup>Because of additional state restrictions in Arkansas, contact the Arkansas Plant Board or a representative for specific instructions about applying Rindé in Arkansas.

**Spray Drift to Sensitive Crops**

**DO NOT** allow Rindé to drift outside the intended target areas onto other desirable plants, especially sensitive crops belonging to the following plant families, or severe injury will occur:

1. *Solanaceae* - tomato, potato, tobacco, eggplant, peppers (*Capsicum*), among others
2. *Umbelliferae* - celery, parsley, carrot, among others
3. *Leguminosae* - alfalfa, green bean, soybean, among others
4. *Convolvulaceae* - sweet potato, among others
5. *Chenopodiaceae* - spinach, sugar beet, among others
6. *Malvaceae* - okra, among others
7. *Cucurbitaceae* - watermelon, cantaloupe, squash, pumpkin, among others
8. *Compositae* - lettuce, sunflower, among others
9. *Linaceae* – flax

**DO NOT** allow spray containing Rindé to drift onto areas where tomatoes are to be planted, have been planted, or onto emerged/transplanted tomatoes, or severe injury will occur.

**PREPARATION AND CLEANUP OF APPLICATION EQUIPMENT**

Adverse crop reaction may result if residues of previously applied products are left in application equipment, or if residues of Rindé are left in spray equipment following application. Clean spray equipment prior to using Rindé, and clean immediately after treatment with Rindé, and before applications with other products.

Before using Rindé completely drain, rinse and clean all spray and mixing equipment, following procedures instructed for the previously used product. If previously sprayed product is not completely removed, Rindé residues could collect in the spray equipment resulting in clogged equipment or greater difficulty in cleaning after use of Rindé.

After spraying Rindé, use the following procedure to clean equipment:

1. Remove any visible residue
2. Drain the spray application equipment, including tank, hoses, spray boom and nozzles.
3. Fill tank 50% full of water, spraying the interior sides of the tank while filling.
4. Use a tank cleaner that DOES NOT contain chlorine and fill the remainder of the tank with clean water. Follow tank cleaner instructions regarding agitation/recirculation of the cleaner throughout the tank, boom and hoses; completely flush boom and hoses prior to draining the tank.
5. Rinse with clean water to remove tank cleaner from tanks, boom, hoses, nozzles and strainers (follow any directions provided with tank cleaner).
6. Fill tank 50% full of water and add 3% active household ammonia (1 gallon per every 100 gallons tank size). Finish filling the tank with clean water, and recirculate the ammonia solution for 15 minutes; completely flush tank, boom, hoses, nozzles and strainers prior to draining the tank.



7. Remove strainers, screens and nozzles, and clean independently in a solution of 3% active household ammonia and water, then replace all strainers, nozzles and screens. Drain.
8. Repeat step 6 (ammonia cleaning step).
9. Completely rinse tank and equipment with clean water, and flush clean water through hoses, boom and nozzles so that all ammonia is removed.

Dispose rinse solutions at an approved waste disposal location or on-site.

### III. ADDITIVES

Postemergence applications of Rindé require the addition of an adjuvant and a nitrogen fertilizer source to achieve optimum weed control.

**Surfactants** - Apply Rindé with a surfactant, unless specific label section or supplemental label indicates otherwise. See 'Rindé Approved Surfactants' bulletin for a list of permitted surfactants and use rates. Use of any surfactant other than those indicated in the approved surfactants bulletin may result in lack of weed control and/or rice injury in which case the user assumes all risk.

#### AND

**Urea-ammonium nitrate (UAN)** – If chosen surfactant does not already contain UAN, addition of 2% volume/volume of 28% to 32% UAN, in addition to an approved surfactant can increase efficacy of Rindé.

Agriculturally approved drift-reducing additives (DRA) may also be used in accordance with the DRA label.

### IV. MIXING ORDER INSTRUCTIONS

Rindé is formulated to mix readily in water. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Following are mixing order guidelines for Rindé either alone or with other components, including spray additives:

#### **WATER:**

1. Fill the spray tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full with clean water.
2. Add the required amount of Rindé to the spray tank while agitating.
3. After Rindé has visibly dispersed, continue agitation and add spray additives while filling the remainder of the tank with water.

#### **TANK-MIX PREPARATION:**

When tank-mixing Rindé with specified herbicides, add the other herbicides and other components in the following order, all while agitating:

1. Fill spray tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full with clean water and start agitation.
2. Add soluble packet products and thoroughly mix.
3. Add Rindé and thoroughly mix.
4. Add WP (wetttable powder), DG (dispersible granule), DF (dry flowable), or F (liquid flowable) formulations.
5. Add EC (emulsifiable concentrate) and liquid products.
6. Add fertilizer and spray adjuvants to the spray tank.
7. Use a silicone based anti-foam agent if foaming occurs.
8. Fill the remainder of the tank with water.
9. Maintain adequate agitation until all contents in the tank are applied.

### V. TANK MIX INFORMATION

Rindé may be used sequentially or tank mixed with other herbicides as part of a complete weed control program. Tank mix directions are for use only in states where the sequential or tank mix product and application site is registered. Refer to Crop Use Directions (Section VII) for more details and for specific tank mix restrictions. Read and follow the applicable Directions for Use on all products included in any tank mix. The most restrictive labeling applies

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

Take care when tank mixing Rindé with products containing the herbicide active ingredient carfentrazone-ethyl (including Aim® EPA registration number 279-3241). Carfentrazone-ethyl can result in antagonism to bispyribac-sodium activity and may result in the need for an additional application of Rindé or other herbicide. If applying an Rindé – carfentrazone-ethyl tank mix, go up to the next Rindé use rate for the particular weed size, and limit use rate of Aim (EPA registration number 279-3241) to no more than 1 fl. oz. product per acre.

Rindé can also be tank mixed with other pesticides, including those containing the insecticide active ingredients lambda cyhalothrin or zeta-cypermethrin; or fungicide active ingredient azoxystrobin.

Not all rice varieties have been tested with all possible tank mix combinations. If you are not familiar with a tank mix containing Rindé and other insecticides, fungicides, and herbicides, it is your responsibility to test the combination for crop safety on a small portion of your rice crop to ensure that a phytotoxic or other adverse response will not occur. In addition, test the physical compatibility of Rindé with tank mix partners before use. In a lidded glass jar (~1 quart size), add all mix partners, in their relative proportions. Invert, shake or mix the jar thoroughly. Observe mixture for approximately 30 minutes (though signs of incompatibility will often be seen within 5 minutes).

#### **Tank Mix Restrictions:**

To avoid injury or antagonism, **DO NOT** tank mix Rindé with pesticide products containing the active ingredients malathion, methyl parathion or propanil.

**DO NOT** apply Rindé within 7 days of application with malathion or methyl parathion.

## **VI. CROP ROTATION INTERVALS**

In case of rice crop failure, only rice, spring or winter wheat, or grain sorghum may be immediately replanted. **DO NOT** plant any crop other than rice, spring or winter wheat, or grain sorghum for 10 months following application.

**DO NOT** replant alfalfa, carrots, clover, dry beans, flax, lentils, peas, safflower, solanaceous crops, or sugar beets for 24 months. Conduct a bioassay before planting any of these crops.

## **VII. CROP USE DIRECTIONS**

### **DRY-SEEDED OR WATER-SEEDED RICE – U.S. RICE GROWING REGIONS (Except California)**

Rindé can be selectively applied postemergence to dry-seeded or water-seeded rice either by itself or as a tank mix partner. Apply Rindé as a postemergence, broadcast spray at 22 - 36 fl oz/A (see Rate Conversion Table 2 for pounds active ingredient per acre) to dry-seeded or water-seeded rice from 3 leaf to green ring (panicle initiation) stage of growth.

**Pre-Flood Application** - When applying Rindé pre-flood, optimum results are obtained when soil is wet to the surface and weeds are actively growing. Allow at least one day after application for herbicide uptake before establishing the permanent flood. If permanent flood is delayed (to allow rice to become tolerant to flood), flush as required to support rice growth and weed growth (which, in turn, supports herbicide uptake). Herbicidal efficacy can be compromised if soil becomes dry after application of Rindé. For best results, establish permanent flood 2 to 7 days after application of Rindé. Weed reinfestation and/or reinvigorated growth of existing weeds can result if permanent flood is held off too long.

**Post-Flood Application** - When applying Rindé post-flood, optimum results are obtained when flood water is adjusted so that a minimum of 70% of the weed plant is above the water level. Two or 3 days after treatment, water level can be raised to normal flood level.

For best results make application of Rindé when night-time temperatures have been at 60° F or higher for at least 3 consecutive nights before application. Lower night-time temperatures can result in reduced herbicidal efficacy.

Rice under stress due to environmental conditions (drought, temperature, etc.) or other conditions (nutrient deficiencies or injury due to herbicide or fertilizer applications) which reduce the plant's metabolism and development can exhibit sensitivity to Rindé. Likewise, weeds under similar stress will not be as susceptible to Rindé treatment. Do not apply to stressed rice or weeds. Do not apply Rindé to rice fields with a history of poor water-holding capacity (porous subsoil) or erratic weed control may result.

Medium grain rice varieties and pubescent (hairy) leaf rice varieties may exhibit more sensitivity to Rindé than long grain or glabrous (smooth) leaf rice varieties. Rice varieties with low seedling vigor (including M-206 or Japanese cultivars) may exhibit sensitivity to Rindé, particularly if they are under environmental or other stress.

Do not allow spray containing Rindé to drift onto areas where tomatoes are to be planted, have been planted, or onto emerged/transplanted tomatoes, or severe injury will occur.

**Table 2 Rate Conversion Table**

Rate of Rindé (fl oz/acre)	Amount of active ingredient (lbs a.i./acre)	
	Bispyribac-sodium	Quinclorac
22	0.021	0.26
24	0.023	0.28
26	0.024	0.30
28	0.026	0.33
30	0.028	0.35
32	0.030	0.38
36	0.034	0.42

**RESTRICTIONS TO USE ON RICE**

- **DO NOT** apply more than 36 fl oz of Rindé (0.034 lb ai/A bispyribac-sodium + 0.42 lb ai/A quinclorac) per treated acre per year.
- **DO NOT** apply more than 0.504 lbs of quinclorac per acre per year.
- **DO NOT** apply more than 0.053 lbs of bispyribac-sodium per acre per year.
- **Minimum application interval for bispyribac-sodium is 3 weeks.**
- **DO NOT** apply Rindé to Bengal rice variety.
- **DO NOT** irrigate other crops with water that has been drained directly from fields treated with Rindé
- **DO NOT** double spray field ends.
- **DO NOT** make application to second crop (stubble/ratoon crop) rice.
- **DO NOT** apply Rindé if commercial crayfish farming is practiced in rice paddies.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply Rindé after green ring (panicle initiation).
- **DO NOT** use rice straw or processing by-products (such as chaff, hulls, etc.) as soil amendments or mulch for high-value crops such as bedding stock, vegetable transplants, or ornamental and fruit trees.
- **DO NOT** use selective application equipment such as recirculating sprayers, wiper applicators, or shielded applicators.
- **DO NOT** apply Rindé by air in any state not listed in Section II. See Table 1 for additional restrictions.
- **DO NOT** allow Rindé to drift outside the intended target areas onto other desirable plants, especially listed sensitive crops.
- **DO NOT** use Rindé on sand and loamy sand soils.

- **DO NOT** apply Rindé on rice-growing soil that does not have an impermeable hard pan to provide good water-holding capacity.
- **DO NOT** apply Rindé to the first rice crop in fields have been land leveled and have extreme cut and heavy fill area (this restriction does not pertain to maintenance leveling).
- Not registered for use in California.

Table 3 Weeds controlled (C) or suppressed (S) with Rindé applied postemergence to rice					
Weed Species	Scientific Name	Post-emergent Activity	Weed Size	fl oz / A	Notes
<b>Grass Weeds</b>					
Barnyardgrass / Junglerice	<i>Echinochloa crus-galli</i> / <i>Echinochloa colona</i>	C	2 leaf up to 5 leaf	26 - 36	1
		C	5 leaf through 1 tiller	28 - 36	1
		C	Up to 3 tillers	30 - 36	1
		S	Late Application	30 - 36	1, 2
Barnyardgrass, perennial	<i>Echinochloa polystachya</i>	S	Up to 2 tillers	28 - 30	3
Baronet grass (bayonetgrass)	<i>Bolboschoenus maritimus</i> – Post Flood Only	C	1 to 3 tillers	30 - 36	3
Crabgrass, large	<i>Digitaria sanguinalis</i>	C	Up to 2'	26 - 32	4
Johnsongrass	<i>Sorghum halepense</i>	C	3'' to 24''	22 - 30	3
Knotgrass	<i>Paspalum ditichum</i>	S	Up to heading	28 - 30	3, 5
Signalgrass, broadleaf	<i>Urochloa platyphylla</i>	C	Up to 2''	26 - 32	4
<b>Broadleaf Weeds</b>					
Eclipta	<i>Eclipta prostrata</i>	C	Up to 2 leaves	23 - 32	1
Jointvetch, Indian	<i>Aeschynomene indica</i>	C	3'' to 18''	22 - 32	1
Jointvetch, Northern	<i>Aeschynomene virginica</i>	C	3'' to 18''	22 - 32	1
Morningglory, cypressvine	<i>Ipomoea quamoclit</i>	C	Up to 2 leaves	26 - 36	4
Morningglory, entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>	C	Up to 2 leaves	26 - 36	4
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	C	Up to 2 leaves	26 - 36	4
Morningglory, palmleaf	<i>Ipomoea wrightii</i>	C	Up to 2 leaves	26 - 36	4
Morningglory, pitted	<i>Ipomoea lacunosa</i>	C	Up to 2 leaves	26 - 36	4
Morningglory, purple moonflower	<i>Ipomoea turbinata</i>	C	Up to 2 leaves	26 - 36	4
Morningglory, tall (common)	<i>Ipomoea purpurea</i>	C	Up to 2 leaves	26 - 36	4
Sesbania, hemp	<i>Sesbania exaltata</i>	C	3'' to 18''	22 - 32	1
Alligatorweed	<i>Alternanthera philoxeroides</i>	S	Up to 10'' runners	28 - 30	1
Annual Rice Flatsedge	<i>Cyperus iria</i>	C	1 to 3 tillers	30 - 36	3
Dayflower	<i>Commelina communis</i>	C	1 leaf up to 4 leaf	22 - 30	3
Ducksalad	<i>Heteranthera</i> spp.	C	1 leaf up to 4 leaf	22 - 30	3
Gooseweed	<i>Sphenoclea zeylanica</i>	C	1 leaf up to 4 leaf	22 - 30	3

Pigweeds	<i>Amaranthus</i> spp.	S	1" to 12"	22 - 30	3
Redstem	<i>Ammannia</i> spp.	S	1" to 4"	22 - 30	3
Smartweed, Pennsylvania	<i>Polygonum</i> <i>pensylvanicum</i>	C	1" to 4"	22 - 30	3
		S	4" to 24"	22 - 30	3
Texas/Mexicanweed	<i>Caperonia</i> spp.	S	1 leaf up to 4 leaf	22 - 30	3
Water Hyssop	<i>Bacopa rotundifolia</i>	C	1 leaf up to 4 leaf	22 - 30	3

Notes:

1. Both bispyribac-sodium and quinclorac controls or suppresses weeds at these rates.
2. Barnyardgrass at 4-tiller to boot growth stage will reduce rice yields. Suppression or control at these growth stages will reduce barnyardgrass seed and allow rice to produce partial yield.
3. Bispyribac-sodium controls or suppresses weeds at these use rates. ALS-resistant biotypes of these weeds may not be controlled by Rindé and other Group 2 ALS inhibitor herbicides.
4. Quinclorac controls or suppresses weeds at these use rates. Group 4 resistant biotypes of these weeds may not be controlled by Rindé and other Group 2 ALS inhibitor herbicides.
5. Apply after rice is in permanent flood and before knotgrass heading with a minimum of 70% of the knotgrass above the water level to suppress knotgrass.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool dry place. Keep pesticide in original container. Keep container closed when not in use. Do not put concentrate or dilute into food or drink containers. Not for use or storage in or around the home. For help with any spill, leak, fire, or exposure involving this material, call day or night 800-424-9300.

**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 CONTAINERS:**

**Rigid, Nonrefillable containers small enough to shake (i.e. with capacities ≤ 5 gallons).**

Nonrefillable container. Do not reuse or refill this container. 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 and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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 a mix tank or collect rinsate 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, Nonrefillable containers too large to shake (i.e. with capacities > 5 gallons).**

Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; and (b) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions. THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE.

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