

# Specimen Label



Dow AgroSciences



HERBICIDE

RINSKOR<sup>TM</sup> ACTIVE

<sup>TM</sup>Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

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

Group	4	HERBICIDE
-------	---	-----------

Active Ingredient:

florpyrauxifen-benzyl: 2-pyridinecarboxylic acid, 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxy-phenyl)-5-fluoro-, phenyl methyl ester.....	2.7%
Other Ingredients .....	97.3%
Total .....	100.0%

Contains 0.21 lb florpyrauxifen-benzyl per gallon.

## Precautionary Statements

### Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-698

## 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

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.

### 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.

## Storage and Disposal (Cont.)

### 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 tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or 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

Loyant™ 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. Loyant will not provide residual control of weeds. 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. Loyant is rainfast within 2 hours after application. Loyant can be applied to rice fields used for crayfish production.

Any crop stress or environmental factors which influence plant health may impact efficacy and crop tolerance. Rice crops grown under adverse environmental conditions, such as extreme cold or heat, may express temporary crop injury when Loyant is applied including slight height reduction or leaf malformations. Such crop effects are transient and do not affect yield. Loyant may be used on all rice varieties and hybrids, including herbicide tolerant varieties. Medium grain and hybrid varieties may be more sensitive to Loyant herbicide than long grain varieties. Use of an agriculturally approved methylated seed oil adjuvant at a rate of 0.5 pints per acre is required to be added to Loyant.

## Use Precautions

- Poor weed control and rice crop injury may result from application of Loyant 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.
- Reinfestation of some weeds may occur if a permanent flood is not established in a timely manner (5 days or sooner after application).
- Application of Loyant 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.

## Use Restrictions

- **Preharvest Interval:** Do not apply within 60 days of rice harvest.
- If 2 applications of Loyant are made, allow 14 days or greater between applications.
- Use of an agriculturally approved methylated seed oil adjuvant at a rate of 0.5 pints per acre is required.
- Do not make more than 2 applications per year (maximum of 16 fl oz per application).
- Do not apply more than 32 fl oz of Loyant per acre per year.
- Do not apply to ratoon rice.
- Do not use organosilicone or organosilicone containing surfactants in spray mixtures of this product.
- 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 other than rice fields.
- Do not tank mix Loyant with malathion or methyl parathion. Do not make an application of malathion or methyl parathion within 7 days of an application of Loyant. See additional tank mix restrictions below.
- Do not apply Loyant directly to, or otherwise permit Loyant 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 Loyant to drift onto desirable broadleaf plants.
- Except for crayfish, do not fish or commercially grow fish, shellfish or crustaceans on treated acres during the year of treatment.
- Do not allow tank mixes of Loyant 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.
- 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

Use of an agriculturally approved methylated seed oil adjuvant at a rate of 0.5 pints per acre is required to be added to Loyant. Do not use organosilicone or organosilicone containing surfactants in spray mixtures of this product. Read and follow all use directions and precautions on methylated seed oil labels.

### Loyant - Alone

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

### Loyant - Tank Mixes

**DO NOT TANK MIX ANY PESTICIDE PRODUCT WITH THIS PRODUCT** without first referring to the following website for the specific product: [www.loyanttankmix.com](http://www.loyanttankmix.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.loyanttankmix.com](http://www.loyanttankmix.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 be met with Loyant and the 0.5 pint of MSO adjuvant. Excess adjuvant may result in rice injury and reduced efficacy.

Do not mix Loyant with products that contain propanil.

**Tank Mix Compatibility Testing:** When tank mixing Loyant with other permitted materials including adjuvants that will be utilized, 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, jels, 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 Loyant and mix thoroughly. Finally, add any solution (S) formulations or surfactant, agitate and finish filling. Maintain agitation during filling and during application. If spraying and agitation must be stopped before the tank is empty, suspended materials may settle to the bottom. It is important to resuspend all of the settled material before continuing application. A sparger agitator is particularly useful for this purpose. 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. Re-circulate 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 Loyant, 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**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions

The following drift management requirements must be followed to limit off-target drift movement from aerial applications:

##### **Aerial Application:**

- Aerial applicators must use a minimum finished spray volume of 10 gallons per acre.
- Drift potential is lowest between wind speeds of 2 to 10 mph. Do not apply below 2 mph due to variable wind direction and high potential for temperature inversion. Do not apply in wind speeds greater than 10 mph.
- To minimize spray drift from aerial application, apply Loyant with a nozzle class that ensures coarse or coarser spray (according to ASABE S572) at spray boom pressure no greater than 30 psi
- The distance of the outer most operating nozzles on the boom must not exceed 70% of wingspan or 80% of rotor diameter.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- Do not apply under conditions of a low level air temperature inversion.
- The maximum release height must be 10 feet from the top of the crop canopy, unless a greater application height is required for pilot safety.

Evaluate spray pattern and droplet size distribution by applying sprays containing a water-soluble dye marker or appropriate drift control agents over a paper tape (adding machine tape). Mechanical flagging devices may also be used. Do not apply under conditions of a low level air temperature inversion. A temperature inversion is characterized by little

or no wind and lower air temperature near the ground than at higher levels. The behavior of smoke generated by an aircraft-mounted device or continuous smoke column released at or near site of application will indicate the direction and velocity of air movement. A temperature inversion is indicated by layering of smoke at some level above the ground and little or no lateral movement.

#### **Ground Application**

- Ground applicators must use a minimum finished spray volume of 10 gallons per acre.
- To minimize spray drift from ground application, apply Loyant with a nozzle class that ensures coarse or coarser spray (according to ASABE S572).
- For boom spraying, the maximum release height is 36 inches from the soil for ground applications.

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

The applicator should be familiar with and take into account the information covered in the following Aerial Drift Reduction Advisory. (This information is advisory in nature and does not supersede mandatory label requirements.)

#### **Aerial Drift Reduction Advisory**

**Information on Droplet Size:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

##### **Controlling Droplet Size:**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length:** To further reduce drift without reducing swath width, boom must not exceed 70% of wingspan or 80% of rotor diameter.

**Application Height:** Do not make applications at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not make applications below 2 mph due to variable wind direction and high inversion potential. Do not apply in wind speeds greater than 10 mph. Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

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

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

the movement of the smoke from a ground source 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.

## Application Instructions

### Environmental Conditions and Herbicidal Activity of Loyant

Factors for effective weed control with Loyant include proper application rate, weed size, daytime and nighttime temperatures, soil moisture prior to and following application, and use of adjuvants. Best weed control results are obtained when Loyant 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.

- Loyant 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 Loyant 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 within 5 days after application of Loyant can benefit weed control.

### Aerial Application

Apply in a spray volume of 10 gpa or more when applying by air. Apply with coarse to coarser droplet category per S-572 ASABE standard; see NAAA, USDA or nozzle manufacturer guidelines. Follow guidelines in the Spray Drift Management and Aerial Drift Reduction Advisory to minimize potential drift to off-target vegetation. Aircraft should be patterned per Operation Safe/PAASS program for calibration and uniformity to provide sufficient coverage and control.

### Ground Application

Apply in a spray volume of 10 gpa or more when applying by ground. Use coarse or coarser nozzle spray quality per S-572 ASABE standard; see USDA literature or nozzle manufacturer guidelines. Follow nozzle manufacturer's recommendations for nozzle pressure, spacing and boom height to provide a uniform spray pattern. Follow appropriate Spray Drift Management information where drift potential is a concern.

### Application Timing

Loyant 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 Loyant 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:

Loyant is recommended as a pre-flood application. Adequate soil moisture for actively growing weeds is essential for pre-flood 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. Reinfestation 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, re-establishment of normal flood depth should begin within 3 hours after application to prevent germination of new weeds.

If Loyant 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 and good control of labeled weeds should not be expected. Regrowth of treated weeds may occur.

## Resistance Management

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.
- Loyant 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 Loyant 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 16 fl oz/acre (1 pint/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>	<i>Echinochloa crus-galli</i>	C	3 tiller
broadleaf signalgrass <sup>1</sup>	<i>Urochloa platyphylla</i>	C	5 leaf
junglerice <sup>1</sup>	<i>Echinochloa colona</i>	C	3 tiller
tighthead sprangletop	<i>Leptochloa panicoides</i>	S	2 tiller
rice flatsedge <sup>1</sup>	<i>Cyperus iria</i>	C	6 leaf
purple nutsedge <sup>1,2</sup>	<i>Cyperus rotundus</i>	C	5 leaf
yellow nutsedge <sup>1,2</sup>	<i>Cyperus esculentus</i>	C	5 leaf
Smallflower umbrellasedge <sup>1</sup>	<i>Cyperus difformis</i>	C	6 leaf
alligatorweed	<i>Alternanthera philoxeroides</i>	C	12" runners
Ammannia (red stem)	<i>Ammannia coccinea</i>	C	8"

## Application Rates and Weeds Controlled or Suppressed (Cont.)

At a rate of 16 fl oz/acre (1 pint/acre) the following weeds are either controlled or suppressed:

Common Name	Scientific Name	Controlled (C) or Suppressed (S)	Maximum Growth Stage
Arrowhead / bulltongue / grassy arrowhead	<i>Sagittaria</i> spp.	C	10"
common ragweed	<i>Ambrosia artemisiifolia</i>	C	8"
ducksalad	<i>Heteranthera limosa</i>	C	4 leaf
eclipta	<i>Eclipta prostrata</i>	C	6"
falsepimpernel, low	<i>Lindernia dubia</i>	C	6"
hemp sesbania	<i>Sesbania herbacea</i>	C	24"
horseweed	<i>Coryza</i> spp.	C	6"
jointvetch, Indian	<i>Aeschynomene indica</i>	C	12"
jointvetch, northern	<i>Aeschynomene virginica</i>	C	12"
Palmer amaranth <sup>3</sup>	<i>Amaranthus palmeri</i>	C	8"
pitted morningglory <sup>4</sup>	<i>Ipomoea lacunosa</i>	C	8"
redroot pigweed	<i>Amaranthus retroflexus</i>	C	8"
redweed	<i>Melochia corchorifolia</i>	C	8"
roundleaf mudplantain	<i>Heteranthera reniformis</i>	C	6"
spreading dayflower	<i>Commelina diffusa</i>	C	6"

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

<sup>2</sup>To achieve control of purple and yellow nutsedge, Loyant must be applied 5 days or sooner to establishment of permanent flood and plants must not exceed maximum growth stage in table.

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

<sup>4</sup>Morningglory species other than pitted morningglory are not controlled by Loyant.

- Do not make more than 2 applications per year (maximum of 16 fl oz per application).
- Do not apply more than 32 fl oz of Loyant per acre per year.
- Allow 14 days or greater between applications.
- 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, otherwise, 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

Dow AgroSciences 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, Dow AgroSciences 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 Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

### 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, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' 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, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental 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 Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

<sup>TM</sup>Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Produced for  
Dow AgroSciences LLC  
9330 Zionville Road  
Indianapolis, IN 46268

Label Code: D02-425-001  
Initial Publication  
LOES Number: 010-02342  
EPA accepted 09/15/17