



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

December 1, 2021

Bill Washburn  
Registration Manager  
Helena Agri-Enterprises, LLC  
225 Schilling Blvd., Suite 300  
Collierville, TN 38017

Subject: Registration Review Label Mitigation for PENDIMETHALIN AND PROPANIL  
Product Name: SETRE PROWL HERBICIDE + PROPANIL  
EPA Registration Number: 5905-495  
Application Dates: 20-JUL-2018 and 24- MAR-2021  
Decision Numbers: 580315 and 572501

Dear Mr. Washburn:

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 pendimethalin and propanil Interim Decisions, 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.

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EPA Reg. No. 5905-495  
Decision No. 580315 and 572501

If you have any questions about this letter, please contact Srijana Shrestha by phone at 202-566-2329, or via email at [shrestha.srijana@epa.gov](mailto:shrestha.srijana@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington".

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure: Stamped Label

PENDIMETHALIN	GROUP	3	HERBICIDE
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PROPANIL	GROUP	7	HERBICIDE
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## Prowl® Herbicide + Propanil

FOR DRY-SEEDED RICE

**ACTIVE INGREDIENT:**

Propanil: 3', 4'-dichloropropionanilide ..... 33.70%  
 Pendimethalin: N-(1-Ethylpropyl)-3,4-dimethyl-2, 6-Dinitrobenzenamine ..... 11.25%

**INERT INGREDIENTS:** ..... 55.05%

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

This product contains the toxic inert ingredient monochlorobenzene.  
 This product contains 3 pounds propanil and 1 pound pendimethalin.

### KEEP OUT OF REACH OF CHILDREN WARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

#### FIRST AID

<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eyelid open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor immediately for treatment advice.</li> </ul>
<b>IF ON SKIN:</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 immediately 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>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have a person sip a glass of water if able to swallow.</li> <li>• Do not give anything to an unconscious or convulsing person.</li> </ul>

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency, call ChemTrec at 1-800-424-9300.

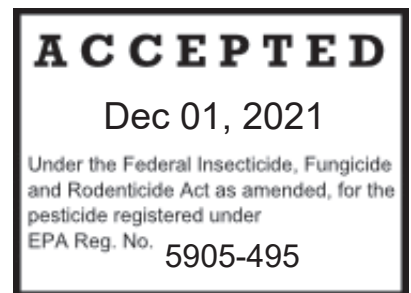
**NOTE TO PHYSICIAN:** This product contains monochlorobenzene.

#### SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO.: 5905-495  
 EPA EST. NO.:

NET CONTENTS:  
 AD 092310

**MANUFACTURED FOR  
 HELENA AGRI-ENTERPRISES, LLC  
 225 SCHILLING BOULEVARD, SUITE 300  
 COLLIERVILLE TENNESSEE 38017**



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING**

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin, or inhaled. Do not get in eyes. Avoid contact with skin or clothing. Avoid breathing spray mist.

**Handler PPE Requirements for Liquid Concentrate Formulations Packaged without Built-in Probes:**

**Personal Protective Equipment (PPE)**

**Mixers, Loaders, Applicators and other handlers must wear the following, except when removing an unrinsed probe:**

- Long-sleeved shirt and long pants.
- Shoes plus socks
- Goggles or face shield, and
- Chemical resistant gloves made of materials such as barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, and viton  $\geq 14$  mils), and chemical resistant apron when mixing/loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- In addition, handlers must wear chemical-resistant footwear when cleaning up spills or equipment.

**Mixers, loaders, and other handlers must wear the following when removing an unrinsed probe:**

- Coveralls over long-sleeved shirt and long pants.
- Chemical resistant gloves made of materials such as barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, and viton  $\geq 14$  mils).
- Chemical resistant footwear plus socks.
- Protective eyewear, if the system operates under pressure, and
- Chemical resistant apron.

See "Engineering Control Statement" for additional requirements.

**Handler PPE Requirements for All Other Liquid Concentrate Formulations Packaged with Built-In Probes:**

Some materials that are chemical resistant to this product are made of barrier laminate, butyl, Nitrile or neoprene or Viton.

**Mixers, Loaders, Applicators and other handlers must wear the following, except when removing an unrinsed probe:**

- Long-sleeved shirt and long pants.
- Shoes plus socks
- Chemical resistant gloves made of materials such as barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, and viton  $\geq 14$  mils), and chemical resistant apron when mixing/loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See "Engineering Control Statement" for additional requirements.

**USER SAFETY REQUIREMENTS**

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.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

## Engineering Control Statement

### For Closed Mixing and Loading System for Liquid Formulations Packaged with a Built-in Probe Mixers and Loaders must either:

- (1) Use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for dermal protection of agricultural pesticides [40 CFR 170.240 (d) (4)],  
OR
- (2) Use the probe system described below:

### For Closed Mixing and Loading System for Liquid Formulations Packaged without Built-in Probes:

- (1) Mixers and loaders must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)] for dermal protection, and must;
- (2) Wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders,
- (3) Wear protective eyewear, if the system operates under pressure, and
- (4) Chemical-resistant footwear must be provided and be immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown.

## PROBE SYSTEM

Specific requirements for use of the probe closed mixing/loading system:

- Remove plug from bung of drum containing this product only when drum is sitting on the ground or on a secure level platform, with the bung end of the drum pointed up.
- Transfer product from the drum to the mixing tank by use of a suction hose connected at one end to the suction pump on the mixing tank and connected at the other end to a probe (dip tube) that is inserted through the bung opening into the drum.
- Do not handle the probe or bung in a manner that allows dripping or splattering of the product onto yourself or any other person.
- Do not touch the portion of the probe that has been in contact with this product until after the probe has been triple rinsed with water.
- If all of the product is removed from the drum, then triple rinse the probe while it remains inside the drum.

## Unrinsed Probes

- If an unrinsed probe must be removed from the drum, then use an anti-dip flange, and immediately transfer the probe into a container of rinse water. The anti-drip flange must be designed to remove excess Propanil from the probe as it is extracted from the drum.
- Take the following steps if the probe must be disconnected from the suction hose before both the probe and the hose have been triple rinsed:
  1. Equip the probe end of the hose with a shut-off valve.
  2. Install a dry break coupling between the valve and the probe.
  3. Close the shut-off valve before disconnecting the probe.

## PERSONAL PROTECTIVE EQUIPMENT FOR ALL TRANSFER SYSTEMS

- In addition, mixers and loaders using all systems must:
  1. Wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders.
  2. Wear protective eyewear, if the system operates under pressure, and
  3. When using a system that meets the requirements in the WPS as a closed system or using a probe system when the probe is not removed, chemical-resistant footwear must be provided; be immediately available, and used in an emergency, such as a broken package, spill, or equipment breakdown.

All systems must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage.

**FLAGGERS:**

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

**Enclosed Cabs for Aerial Applications**

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)).

**USER SAFETY RECOMMENDATIONS****User 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.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to birds. This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water intended for irrigation or domestic purposes. Do not apply when weather conditions favor drift from target areas. Except as provided for in the Directions for Use, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Propanil and 3,4-DCA (a major propanil degradate) are known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**NON-TARGET ORGANISM ADVISORY STATEMENT:** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift

**PHYSICAL OR CHEMICAL HAZARDS**

COMBUSTIBLE. Do not use, pour, spill or store near heat or open flame.

**WEED RESISTANCE MANAGEMENT**

For resistance management, please note that Prowl Herbicide plus Propanil contains both a Group 3 / pendimethalin and a Group 5 / propanil herbicide. Any weed population may contain plants naturally resistant to Group 3 and/or Group 5 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Prowl Herbicide plus Propanil or other Group 3 and Group 5 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage ( or other mechanical control methods), cultural ( e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Helena Agri-Enterprises, LLC at 901-761-0050 or at [www.helenaagri.com](http://www.helenaagri.com)

If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

Plant into weed-free fields and keep fields as weed-free as possible.

To the extent possible, use a diversified approach toward weed management. Whenever possible incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.

Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.

To the extent possible do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seedbank.

Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.

Prevent an influx of weeds into the field by managing field borders.

Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.

Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.

Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.

Use a broad spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. Do not use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.

If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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.

**Plant Back Restriction:** Do not plant or transplant crops in the treated area for at least 60 days following an application of this product.

## **MANDATORY SPRAY DRIFT MANAGEMENT**

### **Aerial Applications:**

- Do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets as indicated in manufactures' catalogues and in accordance with American Society of Agriculture & Biological Engineers Standard S641 (ASABE 641).
- Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must not exceed 65% of the wingspan for fixed wing aircraft or 75% of the rotor diameter for helicopters. Otherwise, the boom length must not exceed 75% of the wingspan for fixed wing aircraft or 90% of the rotor diameter for helicopters.
- If the windspeed is 10 miles per hour or less, applicators must use  $\frac{1}{2}$  swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use  $\frac{3}{4}$  swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply during temperature inversions.

### **Ground Boom Applications:**

- Applicators must only apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- Applicators are required select the nozzle and pressure that deliver medium or coarser droplets as indicated in manufactures' catalogues and in accordance with American Society of Agriculture & Biological Engineers Standard 572 (ASABE S572).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

### **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 15 miles per hour 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 manufacturer's 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.”

### **Boom-less Ground Applications:**

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

### **Handheld Technology Applications:**

- Take precautions to minimize spray drift.

### **Emergency Release Provisions:**

- Water holding (discharge) intervals for flood water following Propanil application in all states.
- For delayed flood (water seeded) rice grown south of Interstate highway 10 from the Texas/Louisiana border to Houston and east of State Highway 35 from Houston to Port Lavaca: Flood water must be held for 10 days after application, unless excessive rainfall completely submerges the rice crop and forces premature release. For Texas rice grown in areas north or west of these boundaries, the water holding interval will be 7 days.
- For delayed flood (water-seeded) rice in Southern Louisiana south of Highway 14: Flood water must be held for 15 days after propanil application unless excessive rainfall completely submerges the rice crop and forces premature release. Delayed flood (water-seeded) rice in Louisiana, north of the Highway 14 boundary, is subject to the 7-day water holding interval provisions.
- For rice grown in California and all other parts of the US not mentioned above: Flood water must be held for 7 days after application, unless excessive rainfall completely submerges the rice crop and forced release.
- For delayed flood (water-seeded) rice grown south of Interstate highway 10 from the Texas/Louisiana border to Houston and east of State Highway 35 from Houston to Port Lavaca – Flood water must be held for 10 days after application, unless excessive rainfall completely submerges the rice crop and forces premature release. For Texas rice grown in areas north or west of these boundaries, the water holding interval will be 7 days.

## **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 24 hours.

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear (goggles, face shield or safety glasses)

## **GENERAL INFORMATION**

**PROWL® HERBICIDE + PROPANIL** is a postemergence treatment which combines the direct contact action of propanil and the residual activity of pendimethalin (PROWL). Since the residual activity of pendimethalin provides pre-emergence control for certain annual grasses which can germinate after this pre-mix treatment is applied, flooding after application can be delayed.

### **RICE APPLICATIONS:**

#### **General Weed Control:**

For maximum weed control with this treatment, it is important to carefully follow the directions below for (1) adequate spray coverage of weeds and soil and (2) proper timing of application, when barnyard grass (watergrass) is in the 1 to 3 leaf stage of growth with an occasional 4 leaf plant (make application when sprangletop is less than ½ inch in height). Do not use in California. DO NOT use this treatment in water seeded rice.

## **SURFACE WATER ADVISORY**

This product may contaminate water through runoff following rainfall events and by seepage through levees. This product has a high potential for runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Levees should be constructed with adequate time prior to chemical application so that they are compacted to reduce seepage and to hold a 3-6 inch flood (2001 Mississippi Rice Growers Guide). Other guidance is located at <http://agronomy.ucdavis.edu/uccerice/water/seep.htm> and from the document "Closed Rice Water Management Systems" from the National Resource Conservation Service of USDA. The University of Arkansas Rice Production Book (<http://www.uaex.edu/other-areas/publications/html>) also provides information concerning levee production.

## **GROUNDWATER ADVISORY**

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical prior to flooding may result in some shallow ground water contamination due to cracks in the subsoil of the rice paddy.

**SPRAYING INSTRUCTIONS: FOR ADDITIONAL SPRAY DRIFT MITIGATION INFORMATION PLEASE SEE SPRAY DRIFT MANAGEMENT UNDER GENERAL USE PRECAUTIONS AND RESTRICTIONS SECTION.**

## EARLY POSTEMERGENCE APPLICATIONS

The seedbed should be firm and free of clods and trash. The seedbed must be prepared to allow for good seed coverage. Previous crop residues should be thoroughly mixed into the soil to a depth of 4 to 6 inches by plowing or disking before planting rice.

Uniformly apply specified treatment by aircraft or ground equipment after rice emergence, according to spraying instructions above, when barnyardgrass is in the 1 to 3 leaf growth stage with an occasional 4 leaf plant (make application when sprangletop is less than ½ inch). THE GROWER SHOULD INSPECT FIELDS FREQUENTLY TO CHECK GROWTH OF BARNYARDGRASS AND/OR SPRANGLETOP TO DETERMINE PROPER APPLICATION TIMING. Timing of applications should be based on the growth stage of barnyardgrass and/or sprangletop and not on the growth stage of rice. If rice is too small to maintain a flood on the field, the treatment can still be applied since flooding can be delayed because of the residual activity of pendimethalin.

While the residual activity of pendimethalin allows flooding to be delayed, proper water management practices must be followed for normal rice growth. Flooding should not be delayed if weeds begin to develop after application. Since soil and weeds must be completely exposed to spray coverage, no flood water should be on field at time of application. If necessary, fields may be flushed prior to treatment to produce vigorous rice and weed growth.

Since the residual activity of pendimethalin is activated by moisture, pendimethalin is most effective in controlling emerging weeds when adequate rainfall or irrigation (flush) is received within 7 days after application.

## WEED SPECIES CONTROLLED

**PROWL® HERBICIDE + PROPANIL** provides direct contact control of the weeds listed below:

Barnyardgrass	(Brachiaria spp.)
Crabgrass, large	(Digitaria sanguinalis)
Croton, woolly	(Croton capitatus)
Foxtail	(Setaria spp.)
Goosegrass	(Eleusine indica)
Gulf Cockspur	(Echinochloa crus-pavonis)
Hoorahgrass	(Fimbristylis miliaceae)
Mexican weed	(Cyperonia palustris)
Paragrass	(Panicum purpurascens)
Pigweed, redroot	(Amaranthus retroflexus)
Redweed	(Melochia corchorifolia)
Sour Dock	(Rumex crispus)
Spearhead	(Rhynchospora corniculata)
Tall Indigo	
or Coffee Bean	(Sesbania exalta)
Texas Millet	(Panicum texanum)
Wiregrass	(Eleocharis spp.)

The following grass species are controlled by the residual activity of **PROWL® HERBICIDE + PROPANIL** at the rates recommended for each soil texture listed below:

Barnyardgrass (watergrass)	(Echinochloa crus-galli or Echinochloa colonum)
Crabgrass	(Digitaria spp.)
Signalgrass	(Brachiaria platyphylla)
Sprangletop	(Leptochloa spp.)

## BROADCAST RATE PER ACRE OF PROWL® HERBICIDE + PROPANIL

Soil Texture	PROWL® HERBICIDE + PROPANIL
<b>COARSE</b> sandy loams	3 qts.
<b>MEDIUM</b> sandy clay loams, *sandy clays, loams, silts, silt loams	4 qts.
<b>FINE</b> silty clay loams, *clay loams, silty clays, clays	4 qts.

1) The addition of 0.75 lbs. of propanil is necessary to obtain maximum contact kill.

\*Sometimes considered transitional soils and may be classified as either medium or fine textured soils.

## NOTES AND RESTRICTIONS

Do not apply more than one application per season.

Application to fields where catfish farming is practiced and drain water from treated fields into areas where catfish farming is practiced is prohibited during 12 months following treatment.

Water drained from the treated rice fields must not be used to irrigate other crops or released within 2 miles upstream of a potable water intake in flowing water (e.g., river, stream, etc.) or within 2 miles of a potable water intake in a standing body of water such as a lake, pond or reservoir.

Do not apply when weather conditions drift from area to be treated.

**DO NOT** apply this mixture within 14 days before or after insecticide applications because serious damage to rice may occur.

**DO NOT** apply in liquid fertilizer.

**DO NOT** make more than one application per season.

**DO NOT** bale or use rice straw for feed or bedding.

**DO NOT** discharge water from treated areas for a period of 30-days after treatment.

**DO NOT** rotate crops other than rice for 30-days following application.

**DO NOT** harvest rice grown within 60-days following treatment.

## STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL.

### PESTICIDE STORAGE

Keep containers closed when not in use. Do not use, pour, spill or store near heat or open flame. Store in a dry location away from children, animals, foods, feeds, seeds, or other agricultural chemicals. If entire contents are not used, protect remaining material from moisture and heat. Resealing by rolling top down and storage under roof are recommended. In the event of spillage, scrape up material and dispose of in accordance with **DISPOSAL**. Repackage and relabel usable product in a sound container. In case of fire or other emergency, report at once by toll-free telephone to 800-424-9300.

### DISPOSAL

**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 DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Offer for recycling, if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

**Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.**

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of

Helena Agri-Enterprises, LLC (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. To the extent allowed by law, the Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Agri-Enterprises, LLC's election, one of the following:

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

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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