

APR 14 1997

Yellow

Ms. Janet M. Overholt  
American Cyanamid Co.  
P.O. Box 400  
Princeton, NJ 08543

Dear Ms. Overholt:

Subject: Supplemental Labeling-Delayed Preemergence Applications  
Dry-Seeded Rice in AR, LA, MS, and MI  
PROWL 3.3 EC Herbicide  
EPA Reg. No. 241-337  
Your submission dated March 7, 1997

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable and a stamped copy is enclosed for your records.

Sincerely yours,

James A. Tompkins  
Product Manager 25  
Fungicide-Herbicide Branch  
Registration Division (7505C)

**PROWL**<sup>®</sup>  
3.3 EC herbicide

2 95  
**Supplemental  
Labeling**

EPA Reg. No. 241-337

ACCEPTED  
with COMMENT  
In EPA Letter Dated  
APR 14 1997

**FOR USE IN BROADCAST, DRY-SEEDED RICE  
IN ARKANSAS, LOUISIANA, MISSISSIPPI  
AND MISSOURI**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

241-337  
241-337  
**USE OF PROWL 3.3 EC ALONE OR PROWL 3.3 EC PLUS  
ARROSOLO<sup>1</sup>, PROPANIL OR BOLERO<sup>2</sup> 8 EC TANK MIXTURES  
FOR DELAYED (LATE) PREEMERGENCE WEED CONTROL**

OBSERVE ALL PRECAUTIONARY STATEMENTS IN THE PROWL 3.3 EC, ARROSOLO PROPANIL, AND BOLERO 8 EC LEAFLET LABELS BEFORE USING. OBSERVE ALL USE DIRECTIONS INCLUDING PRECAUTIONS, RESTRICTIONS AND LIMITATIONS, GENERAL INFORMATION, USE AREA, MIXING AND APPLICATION INSTRUCTIONS, USES WITH OTHER PRODUCTS, WEEDS CONTROLLED AND ROTATIONAL CROP RESTRICTIONS. OBSERVE THE MOST RESTRICTIVE INSTRUCTIONS ON ANY PRODUCT LABEL.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This label must be in the possession of the user at the time of herbicide application.

This label expires ~~December 31, 1999~~ February 28, 1997.

**GENERAL INSTRUCTIONS**

PROWL 3.3 EC alone or PROWL 3.3 EC plus Arrosolo or propanil or Bolero 8 EC may be applied as a delayed (late) preemergence application in broadcast, dry-seeded rice.

**DO NOT** use in California.

This pesticide is toxic to fish and aquatic organisms. Fish may be killed at application rates recommended on the label. **DO NOT** contaminate water by cleaning of equipment or disposal of wastes.

**DO NOT** apply to rice fields if fields are used for fish production, especially catfish or crayfish farming.

**DO NOT** make more than one application of PROWL 3.3 EC per season.

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

**DO NOT** use water containing PROWL 3.3 EC residues from rice cultivation to irrigate food or feed crops which are not registered for use with PROWL 3.3 EC.

®Registered Trademark of American Cyanamid Co.

<sup>1</sup> Arrosolo is a Trademark of Zeneca.

<sup>2</sup> Bolero EC is a Trademark of Valent USA Corporation.

**DO NOT** plant crops in PROWL 3.3 EC treated fields unless PROWL 3.3 EC is registered for use on those crops.

In case of a crop failure due to weather conditions or other agronomic factors disease following treatment with PROWL 3.3 EC alone or in a tank mixture, rice can be replanted immediately on silt loam soils, only drilled, dry seeded rice may be immediately replanted. The rice must be planted utilizing a drill with uniform depth and proper seed coverage; however, the grower assumes all risks and consequences associated with replanting of rice because there is the potential for stand reduction or stunting. A 10 percent increase in seeding rate is recommended. The seeding rate should be increased by 20% over the seeding rate used for the first planting. Replant seed below the herbicide layer because reduced stand or stunting may occur if PROWL 3.3 EC contacts germinating rice seed. **DO NOT** replant with gibberellic acid treated seed. **DO NOT** reapply PROWL 3.3 EC alone or in a tank mixture.

PROWL 3.3 EC is not recommended for use on peat or muck soils.

**Delayed (late) Preemergence Applications  
in Broadcast, Dry-Seeded Rice**

PROWL 3.3 EC plus Arrosolo or propanil combine the direct contact action of Arrosolo or propanil with the residual activity of PROWL 3.3 EC. PROWL 3.3 EC will provide residual control of labeled grass weeds which can germinate after the tank-mixture is applied.

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.

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 recommended rates of PROWL 3.3 EC alone or PROWL 3.3 EC plus Arrosolo, propanil, or Bolero 8 EC treatment by aircraft or ground equipment.

While the residual activity of PROWL 3.3 EC 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.

For maximum direct contact activity of Arrosolo or propanil, delay application if there is a chance of rain within 6 to 8 hours.

**DO NOT** apply PROWL 3.3 EC plus Arrosolo or propanil tank mixture within 14 days before or after insecticide applications because serious damage to rice may occur.

**Application Timing**

PROWL 3.3 EC alone or PROWL 3.3 EC plus Arrosolo, propanil or Bolero 8 EC tank mixture may be applied for delayed preemergence weed control in broadcast, dry-seeded rice as follows:

1. The seedbed should be firm and free of clods. The **PLANTING RATE SHOULD BE INCREASED 20%** over drill-seeded planting rates to ensure sufficient plant populations. Rice seed should be broadcast and incorporated with a field cultivator or similar implement to ensure soil coverage of seed. Fields should be **ROLLED AFTER PLANTING** to pack the soil and further cover the rice seed. Uncovered seed can result in reduced stands or stunting if PROWL 3.3 EC contacts germinating rice seed.
2. Apply PROWL 3.3 EC alone or in tank mixture to levees after the levees are pulled and planted. Exposed seeds that come in contact with PROWL 3.3 EC may be injured.

- 3. Uniformly apply the recommended PROWL 3.3 EC or PROWL 3.3 EC tank mixtures after rice planting (as described below) and before rice emergence (spiking), by aircraft or ground equipment according to spraying instructions below. **THE GROWER SHOULD INSPECT FIELDS FREQUENTLY TO CHECK GROWTH OF RICE TO DETERMINE PROPER APPLICATION TIMING.**
- 4. Apply PROWL 3.3 EC or PROWL 3.3 EC tank mixtures after the rice seed has absorbed water and after the soil has been previously sealed over the seed by at least 1 inch rainfall or by irrigation (flush). If the soil has not been sealed by rain or flush, apply when 80 percent of germinated seeds have a primary root (radicle) or shoot at least 1/2 inch long.

If applied to soil prior to these conditions, or to cracked soil, then stand reduction or stunting of rice may occur. Under some conditions, use of gibberellic acid-treated seeds, **HEAVY RAINFALL OR FLUSHING IMMEDIATELY AFTER APPLICATION** may result in herbicide injury to rice. Rice can overcome moderate injury with appropriate cultural practices.

- 5. Apply **ONLY** when growing conditions favor vigorous rice growth. The seedbed should have adequate moisture for seed germination. If there is insufficient moisture, flushing is recommended before PROWL 3.3 EC application to supply moisture for root (radicle) initiation and for vigorous rice and weed growth.

**DO NOT** apply PROWL 3.3 EC and then flush for germination. **DO NOT** apply to stressed rice. Stress factors include cold or hot temperature extremes, excessive moisture or drought, problem soils, poor field drainage or deep water after application. **DO NOT** apply early preemergence nor preplant incorporated as severe rice injury is possible.

- 6. Apply when soil surface is dry, moist, or wet without standing water. Cloddy soil, standing water (puddles) at the time of application, or cracks in the soil that form after application may result in reduced weed control.
- 7. Because the residual activity of PROWL 3.3 EC allows for delayed flooding, this treatment may be applied if rice is too small to maintain a flood on the field for weed control. However, proper water management practices must be followed for normal rice growth and activity of PROWL 3.3 EC. Flooding should not be delayed if weeds begin to develop after application.

Residual activity of PROWL 3.3 EC and Bolero 8 EC are most effective when applied to moist soil. Soil should be kept moist after application and not be allowed to crust or crack.

**Use Rates**

**Broadcast Rate per Acre of PROWL 3.3 EC Alone or  
PROWL 3.3 EC plus Arrosolo, Propanil or Bolero 8 EC  
Tank Mixture for Delayed Preemergence Application in Rice  
(Pints per Acre)**

Soil Texture	PROWL 3.3 EC	Arrosolo or Propanil*	Bolero 8 EC
Sands, loamy sands	DO NOT USE	DO NOT USE	DO NOT USE
Sandy loams	1.8 pts	6.0 to 8.0 pts	2 to 3 pts
Loams, silt loams, silts, sandy clay loams	1.8 to 2.4 pts	6.0 to 8.0 pts	3 to 4 pts
Silty clay loams, clay loams, sandy clays, silty clays, clays	1.8 to 2.4 pts	6.0 to 8.0 pts	3 to 4 pts

\*Based on 4 lb a.i. per gallon

Use the high rate of Arrosolo or propanil if the following situations exist at the time of application: (1) unseasonably cool weather, (2) barnyardgrass has progressed to predominantly the 3 to 4 leaf stage, or (3) emerged sprangletop (less than 1/2 inch) is present.

Use the higher rate of PROWL 3.3 EC for each soil texture if heavy weed populations are anticipated

**Spraying Instructions**

Spray drift can cause injury to sensitive crops. See the propanil, Arrosolo or Bolero 8 EC labels for sensitive crops: follow all recommendations to minimize drift.

**DO NOT** apply PROWL 3.3 EC through any type of irrigation system.

**DO NOT** apply in liquid fertilizer.

**Aerial Applications**

For aerial application, apply the recommended rate in 5 to 10 (10 to 12 for propanil and Arrosolo) gallons of water per acre to ensure adequate coverage. To minimize drift, **DO NOT** apply during periods of gusty winds or when wind conditions favor drifting. It is recommended that a flagman or an automatic mechanical flagging unit on the aircraft be used to avoid overlapping and possible crop injury.

**Ground Applications**

For ground equipment, apply the recommended rate in 10 to 20 (15 to 25 for propanil and Arrosolo) gallons of water per acre to ensure adequate coverage. Use a properly calibrated low-pressure (20 to 40 psi) sprayer equipped with 8002 or larger size Tee-Jet or comparable nozzles to achieve uniform spray distribution and minimize drift. Keep the bypass line on or near the bottom of the tank to minimize foaming. Nozzle screens must be no finer than 50 mesh. **DO NOT** apply PROWL 3.3 EC during periods of gusty winds or when wind velocity is greater than 20 mph.

**DISCLAIMER**

**THE USER ASSUMES ALL RISKS AND CONSEQUENCES ASSOCIATED WITH APPLICATIONS OF PROWL 3.3 EC ALONE OR PROWL 3.3 EC PLUS ARROSOLO, PROPANIL AND BOLERO 8 EC TANK MIXTURES TO RICE CROPS.**

**REFER TO THE PROWL 3.3 EC, ARROSOLO, PROPANIL AND BOLERO 8 EC LEAFLET LABELS FOR ADDITIONAL DISCLAIMER STATEMENTS.**

