PROWL® 3.3 EC herbicide

Supplemental Labeling

EPA Reg. No. 241-337 1P0.361 PC=108501

FOR USE IN NONBEARING TRANSPLANTS OF CITRUS, FRUIT AND NUT TREES AND VINEYARDS

OBSERVE ALL PRECAUTIONARY STATEMENTS, MIXING AND APPLICATION INSTRUCTIONS, AND ROTATIONAL CROP RESTRICTIONS IN THE PROWL 3.3 EC LEAFLET LABEL BEFORE USING.

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.

PROWL 3.3 EC herbicide controls most annual grasses and certain broadleaf weeds as they germinate, but it will not control established weeds. Destroy existing weeds before or during application of PROWL 3.3 EC.

PROWL 3.3 EC may be applied preplant incorporated, preplant surface, or through chemigation for control of most annual grasses and certain broadleaf weeds in nonbearing citrus, fruit and nut tree and vineyard transplants. PROWL 3.3 EC may be used on the following nonbearing crops:

Almond	Lemon	Pistachio
Apple	Nectarine	Plum
Apricot	Orange	Prune
Cherry	Peach	Tangelo
Grape	Pear	Tangerine
Grapefruit	Pecan	Walnuts

Use Methods and Timings

Preplant surface - Prior to transplanting, uniformly apply in 20 or more gallons of water per acre (broadcast basis) with ground or aerial equipment. Use PROWL 3.3 EC use rates listed in the table below. **PROWL 3.3 EC treatments are most effective in controlling weeds when adequate rainfall or irrigation is received within 21 days after application.**

Preplant Incorporated - Uniformly apply PROWL 3.3 EC prior to transplanting but before weeds emerge. Use PROWL 3.3 EC rates listed in the table below. Incorporate PROWL 3.3 EC to a depth of 1 to 2 inches. For mechanical incorporation of PROWL 3.3 EC, use Flex-tyne drag or diamond-toothed harrows operated two times at more than 5 mph with the second pass made at an angle to the first. Application and incorporation must be made prior to tansplanting to avoid mechanical injury to the crop.

Chemigation - PROWL 3.3 EC may be applied through properly equipped chemigation systems. Refer to the "CHEMIGATION" section of this label for complete use directions and precautions.

ACCEPTED
MAR 31 1999
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 241-337

PROWL 3.3 EC Use Rates

Recommended use rates for PROWL 3.3 EC alone and in tank mix applications are given in the following table.

Broadcast Rate Per Acre of PROWL 3.3 EC
Preplant Applications for Transplant Citrus, Fruit and Nut Crops and Vineyards

Short-term control (4 months)	2.4 qts
Long-term control (6 to 8 months)	4.8 qts

PROWL 3.3 EC Tank Mixes

PROWL 3.3 EC may be used in combination with a contact herbicide registered for use in the specific nonbearing crop to remove existing vegetation. Consult and follow contact herbicide label for all directions, precautions and restrictions.

PRECAUTIONS

DO NOT allow treated soil to come in contact with the roots of the transplanted trees or vines or **crop injury will occur.**

DO NOT allow treated soil into the hole dug for the transplant or **crop injury will occur.**

Transplanted root system must be below the treated soil zone or **crop injury will occur.**

DO NOT feed forage or graze livestock in treated fields.

CHEMIGATION

PROWL 3.3 EC may be applied through solid set, hand move, low volume sprinkler (micro sprinkler) and drip (trickle) irrigation systems. Follow all label recommendations regarding rates per acre, timing of application, special instructions, and precautions.

DO NOT apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

The system must be properly calibrated (with water only) to ensure that the amount of PROWL 3.3 EC applied corresponds to the recommended rate.

Apply PROWL 3.3 EC in 1/2 to 3/4 inches of water during the first sprinkler set. When application is complete, flush the system with water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Special Precautions for all Sprinkler of Drip Chemigation Applications

1. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

2. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

3. The system must be free of leaks and clogged nozzles.

4. The pesticide must be supplied continuously for the duration of the aqueous application. An uneven application may cause injury to the crop or poor weed control.

5. Agitation must be maintained in the nurse tank.

6. The sprinkler-chemigation system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

7. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

8. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

11. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

12. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

Chemigation Systems Connected to Public Water Systems

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

3. All chemigation systems connected to public water systems must also follow restrictions listed in the preceding section titled "CHEMIGATION."

Low Volume Sprinkler (micro sprinkler) and drip (trickle) Irrigation Instructions
Low volume sprinkler - 4 to 50 gallons per hour (gph) per emitter, drip - 0.5 to 3 gph per emitter. Point of application should be above ground.

Irrigation system should run a sufficient amount of time prior to PROWL 3.3 EC injection to have all emitters functioning properly. After system is operating properly, length of injection should be such that at one period of time during the injection, the first and last emitters in the system contain PROWL 3.3 EC treated water. Add PROWL 3.3 EC to the supply tank already filled with the volume of water required for the injection period. Maintain proper agitation in PROWL 3.3 EC injection tank. PROWL 3.3 EC should be mixed in clean water and injected down-line from filters. Following PROWL 3.3 EC injection, system should be flushed for a period of time sufficient to clear the line of PROWL 3.3 EC. (If PROWL 3.3 EC application is made during a normal irrigation cycle, injection should be made during the last stage.)

Chemigation Calibration (for low volume micro sprinklers)
Calculation of use rate is based on **wetted area** around emitters - **NOT** on tree acres. To determine correct amount of PROWL 3.3 EC, use the following formula:

1. Treated area per each emitter = A
   A = 3.14 x (radius x radius)
   Example: If the average distance from emitter to perimeter of wetted area measured one inch below soil surface is 13 inches, then
   A = 3.14 x (13" x 13")
   A = 3.14 x (169")
   A = 530.7 square inches

2. The area in square feet wet in each acre = B
   $$B = \frac{A \times \text{emitters/acre}}{144}$$
   Example: If there are 300 emitters per acre, then
   $$B = \frac{530.7 \times 300}{144} = B = 1105.6 \text{ square feet wetted per acre.}$$

3. The total area (in square feet) wet by your system = C
   C = B x acres covered by system
   Example: If the system covers 20 acres, then
   C = 1105.6 square feet per acre x 20 acres
   C = 22,112 square feet wetted by system

4. Amount of PROWL 3.3 EC to inject = S
   Rate per treated acre of PROWL 3.3 EC = R
   $$S = \frac{C}{43{,}560} \times R = \text{quarts of PROWL 3.3 EC}$$
   Example: If the desired application rate per treated acre is 2.4 qts of PROWL 3.3 EC, then
   $$S = \frac{22{,}112}{43{,}560} \times 2.4 = S = 1.22 \text{ quarts of PROWL 3.3 EC should be injected into system.}$$

(**NOTE:** Select the proper rate (R) based on length of control required.)