

# RESTRICTED USE PESTICIDE

Because Pronamide has produced tumors in laboratory animals, this product is for retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.



# WILLOWOOD PRONAMIDE 50WSP

PROPYZAMIDE | HERBICIDE

GROUP

3

HERBICIDE

## SUPPLEMENTAL LABELING

READ THE ENTIRE LABEL FOR WILLOWOOD PRONAMIDE 50WSP BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Label" as used in this supplemental labeling refers to the label booklet for Willowood Pronamide 50WSP and this supplement.

**Expiration Date** This supplemental label expires on September 1, 2014 and must not be used or distributed after this date.

## Willowood Pronamide 50WSP

EPA Reg. No. 87290-3

APPLICATION TO HEAD LETTUCE / ENDIVE / ESCAROLE /  
RADICCHIO GREENS

INCLUDING SINGLE APPLICATION AND SPLIT APPLICATION AND  
CHEMIGATION

KEEP OUT OF REACH OF CHILDREN

# CAUTION

## 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.

Willowood Pronamide 50WSP is a selective herbicide for the control of certain annual grasses and broadleaf weeds in direct seeded or transplanted head lettuce, endive, escarole and radicchio greens.

## Weeds Controlled

Willowood Pronamide 50WSP is effective at 2 to 4 lb of product (1 to 2 lb active ingredient) per treated acre for the preemergence control of the following weeds:

### Grasses

barley, foxtail  
barley, volunteer  
barnyardgrass  
bluegrass, annual  
brome, downy (cheatgrass)  
canarygrass  
crabgrass  
foxtail, yellow  
goosegrass  
lovegrass  
oats, volunteer  
panicum, fall  
ryegrass, Italian  
rye, volunteer  
wheat, volunteer

### Broadleaf Weeds

carpetweed  
chickweed, common  
goosefoot, nettleleaf  
henbit  
knotweed  
lambsquarters, common  
mornignglory, annual  
mustard, wild  
nettle, burning  
nightshade, black  
nightshade, hairy  
purslane, common  
rocket, London  
shepherdspurse  
smartweed, pale  
tomato, volunteer

### Dosage

Willowood Pronamide 50WSP may be applied at the rate of 2 to 4 lb of product (1 to 2 lb active ingredient) per acre broadcast application. The dosage rate required is dependent on soil texture and method of irrigation. At rates specified on this label, Willowood Pronamide 50WSP may not be applied for weed control on highly organic (peat and muck) soils.

For head lettuce, endive, escarole and radicchio greens, follow the dosage instructions listed in chart below:

Lb of Willowood Pronamide 50WSP Per Broadcast Acre <sup>1</sup>			
Weeds	Dependable Rainfall or Overhead Irrigation	Less Dependable Rainfall or Furrow Irrigation	Soil Texture Group <sup>2</sup>
susceptible annual Grasses	2 - 3 (surface application)	3 - 4 (soil incorporation)	Coarse and medium Textured soils
broadleaf weeds	3 - 4 (surface application)	4 (soil incorporation)	Fine textured soils

<sup>1</sup> Reduce dosage rate accordingly for banded applications.

<sup>2</sup> Soil Texture Group

**Coarse:** sand, loamy sand, sandy loam

**Medium:** loam, silt loam, silt, sandy clay loam

**Fine:** silty clay loam, clay loam, sandy clay, silty clay, clay

## **Crop Tolerance**

Most varieties of head lettuce are highly tolerant of the specified rates of Willowood Pronamide 50WSP. Do not use more than 3 lb Willowood Pronamide 50WSP on val temp, grande verde and prima verde varieties of crisp head lettuce, or on endive, escarole and radicchio greens.

## **Timing and Application**

Willowood Pronamide 50WSP can be applied either pre-plant, post-plant or postemergence to head lettuce, endive, escarole or radicchio greens in banded, bed-topped or broadcast applications. Most applications will be made preemergence to the crop just before or after planting and preemergence to the weeds. Applications can be made before or after thinning of head lettuce but must be made prior to weed emergence.

### **Split Application:**

Willowood Pronamide 50WSP application can be split so that part of the maximum application rate of the product can be initially applied to head lettuce, endive, escarole or radicchio greens, and the balance of the maximum application rate can be applied up to 10 days later. Total amount of Willowood Pronamide 50WSP applied must not exceed the maximum rates indicated above, up to 4 lb of product (2 lb active ingredient) per acre per crop season. An example of this split application would be an application of 1 lb. product ( $\frac{1}{2}$  lb active ingredient) per acre at planting and 3 lbs. product ( $1 \frac{1}{2}$  lb active ingredient) per acre 7 to 10 days post plant.

Do not apply Willowood Pronamide 50WSP to head lettuce within 55 days of harvest and do not make more than two applications to each crop of head lettuce, endive, escarole or radicchio greens.

Mix the specified amount of Willowood Pronamide 50WSP in clean water and apply uniformly with a ground sprayer in 20 to 50 gallons of water per treated acre. Reduce dosage and volume accordingly for banded treatments. Use a standard low pressure sprayer equipped with flat fan nozzles that provide uniform spray distribution.

### **Application Moisture Requirements**

Willowood Pronamide 50WSP acts mainly through root absorption, therefore it is necessary to move Willowood Pronamide 50WSP into the root zone of germinating weeds to provide effective control. This can be accomplished by overhead sprinkler irrigation, by rainfall or by shallow mechanical incorporation.

### **Sprinkler Irrigation**

Willowood Pronamide 50WSP can be applied to the soil surface without mechanical incorporation after planting or transplanting if overhead irrigation is used. An initial irrigation of 1 to 2 inches must promptly follow the application of Willowood Pronamide 50WSP, especially in hot weather.

### **Applications Dependent on Natural Rainfall**

In areas of dependable natural rainfall, Willowood Pronamide 50WSP can be applied as a surface treatment preemergence to the weeds. Applications to direct seeded or transplanted head lettuce, endive, escarole or radicchio greens are most successful when followed by  $\frac{1}{2}$  to 1 inch of rainfall within two to three days after application.

### **Furrow Irrigation – Mechanical Incorporation**

Where rainfall is not dependable or supplementary overhead irrigation is not used, shallow pre-plant incorporation is required. PTO-driven incorporators or rolling cultivators that thoroughly mix Willowood Pronamide 50WSP into the top 2 inches of soil are suggested.

Incorporation must be simultaneous or immediately after application of Willowood Pronamide 50WSP, especially in hot weather. Irrigation must be started as soon as possible.

Where furrow irrigation is used, spray application and mechanical incorporation must be made after beds have been formed. Willowood Pronamide 50WSP will not be as effective if disced in prior to bed shaping. Hoeing, thinning or shallow cultivation of soil treated with Willowood Pronamide 50WSP will not destroy its herbicidal activity.

## **Temperature**

Willowood Pronamide 50WSP is not highly volatile, but it may degrade rather quickly if left exposed on the soil surface in warm weather. If applied when air temperatures exceed 85°F it must be shallow incorporated or watered into the soil as soon as possible, preferably within 1 or 2 days.

## **Rotation Crops**

Follow the directions given in the Product Information section of the Willowood Pronamide 50WSP label under Rotation Crop Planting Information.

## **Head Lettuce/Endive/Escarole/Radicchio Greens – Specific Use Restrictions**

- Do not apply Willowood Pronamide 50WSP to head lettuce, endive, escarole, radicchio varieties that will be harvested

less than 55 days after treatment.

- Do not apply more than two applications of Willowood Pronamide 50WSP to each crop of head lettuce, endive, escarole or radicchio greens.
- Do not apply Willowood Pronamide 50WSP to leaf lettuce.
- Do not apply more than 4 lb of Willowood Pronamide 50WSP (2 lb active ingredient) per acre per crop season.

**Chemigation Application on Head Lettuce, Endive, Escarole or Radicchio  
(For Use in Arizona and California)**

Notwithstanding chemigation prohibition on the package label, this supplemental label permits chemigation on the crops listed. Apply Willowood Pronamide 50WSP by chemigation for weed control in direct seeded or transplanted head lettuce, endive, escarole or radicchio. Application must be made prior to weed emergence. Application may be made preemergence to head lettuce, endive, escarole, or radicchio greens or postemergence to head lettuce. **Do not apply postemergence to endive, escarole, or radicchio greens.**

**Application Rate:** Apply Willowood Pronamide 50WSP at the rate of 1 to 2 lbs. per acre (0.5 to 1 lb. active ingredient per acre) depending upon soil type, weed species and level of infestation.

**Split Application:**

Willowood Pronamide 50WSP chemigation application can be split, so that part of the maximum application rate of the product can be initially applied to head lettuce, endive, escarole or radicchio greens, and the balance of the maximum application rate can be applied up to 10 days later. Total amount of Willowood Pronamide 50WSP applied must not exceed 2 lbs. product (1 lb. active ingredient) per acre per crop season. The Pre-harvest Interval (PHI) of 55 days must be observed. An example of this split application would be application of ½ lb. product (¼ lb. active ingredient) per acre at planting and 1 ½ lbs. product (¾ lb. active ingredient) per acre 7 to 10 days post plant.

**Application Moisture Requirements:** Willowood Pronamide 50WSP acts mainly through root absorption; therefore, it is necessary to move Willowood Pronamide 50WSP into the root zone of germinating weeds to provide effective control. This can be accomplished by applying a minimum of 0.75 inch of overhead sprinkler irrigation when applied by chemigation to fields that have been pre-irrigated.

**Time of Treatment:** Applying Willowood Pronamide 50WSP following initial irrigation of the crop will avoid movement of the herbicide below the root zone of germinating weeds and improve weed control. The optimal application timing following pre-irrigation will vary depending on season, weed species present and environmental conditions. The following information is provided as a general guideline:

Timing	Date	Application Timing (Days After Starting Sprinklers)
Early	Sept. 1 to Oct. 15	1-3
Mid	Oct. 15 to Dec. 15	3-6
Late	Dec. 15 to Jan.	5-6

**Chemigation Equipment:** Willowood Pronamide 50WSP may be applied through center pivot, lateral move, solid set or hand move systems capable of uniform delivery of the herbicide. Solid set or hand move systems should be capable of delivering a uniform pressure of 60 to 70 psi at all nozzles. Pipes and nozzles must be positioned to provide uniform coverage of the treatment area. Placement of nozzles in a diamond shaped (◆) pattern will provide more uniform coverage. Do not apply when wind velocity is sufficient to distort uniformity of coverage or cause drift to susceptible non-target plants.

The injection-metering pump must be calibrated as specified by the manufacturer and checked periodically during application to ensure proper operation. Pesticide injection hoses, which connect chemigation-metering equipment to the sprinkler irrigation system, must be of braided reinforced construction with an internal tube made of nylon, cross-linked polyethylene, or high-density polyethylene.

**Mixing:** Mixing tanks should be large enough to contain the entire amount of herbicide mixture for the area to be treated. Use a minimum of 3 gallons of water per pound of Willowood Pronamide 50WSP. Add Willowood Pronamide 50WSP water-soluble packets slowly and allow packets to disperse completely before beginning injection. Agitation of the herbicide mixture is required at all times during mixing and application (injection).

**Application:** For hand move or solid set systems set up to deliver about 1/10 inch of water per hour, Willowood Pronamide 50WSP should be injected over a period of 1 to 2 hours. Once the herbicide has been injected, continue irrigation for an additional 4 to 6 hours to flush the system and deliver additional irrigation sufficient to incorporate the herbicide into the upper inch of soil.

In pre-irrigated fields, center pivot or lateral move systems should be set up to deliver a minimum of 0.75 inch of irrigation

water with the chemigation treatment. In center pivot or lateral move systems, the herbicide mixture should be injected continuously throughout the irrigation cycle.

### **Chemigation Use Restrictions for Head Lettuce, Endive, Escarole or Radicchio**

- In Fresno County, use only in the months of August through September.
- **Preharvest Interval:** Do not apply within 55 days of harvest.
- Do not apply more than two applications of Willowood Pronamide 50WSP to each crop of head lettuce, endive, escarole, or radicchio greens.
- Do not apply Willowood Pronamide 50WSP postemergence to endive, escarole, or radicchio greens.
- Do not apply more than 2 lbs. of Willowood Pronamide 50WSP (1 lb. active ingredient) per acre.
- Do not apply to leaf lettuce.

### **Chemigation Instructions**

Do not apply this product through any irrigation system unless the instructions for chemigation are followed. Apply this product only through continuously moving center pivot, lateral move end tow, solid set, or hand move irrigation systems. 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 nonuniform distribution of treated water.

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

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.

### **Sprinkler Chemigation**

1. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.
2. The 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 back-flow.
3. The pesticide injection pipeline must contain a functional automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
4. 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.
5. The system must contain functional interlocking control to automatically shut off the pesticide injection pump when the water pump motor stops.
6. 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 that pesticide distribution is adversely affected.
7. 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.
8. Do not apply when wind speed favors drift beyond the area intended for treatment.

Read the “**CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**” in the label booklet for Willowood Pronamide 50WSP before using.



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