

# For Use in Selected Crops

EPA Reg. No. 70506-230	
(1 gallon contains 3.8 lbs. of microencapsulated pendimethalin in an aqueous carrier.)	
TOTAL:	100.0%
OTHER INGREDIENTS:	
Pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine	
ACTIVE INGREDIENT:	

# CAUTION/PRECAUCIÓN

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				
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical treatment, call the Rocky Mountain Poison Control Center at 1-866-673-6671.					

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.

h			
HERBICIDE	NET CONTENTS:	GALLONS	(l) UPI

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing.

# Personal Protective Equipment (PPE)

Some materials that are chemically resistant to these products are listed below. For more options, refer to Category A on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as nitrile, butyl, neoprene, and/or barrier laminate
- · Shoes plus socks

Follow manufacturer's instruction for cleaning and 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 Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240)(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **USER SAFETY RECOMMENDATIONS**

Users must:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing 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 product is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters or rinsate.

### **Endangered Species Protection**

If endangered plant species occur in proximity to the application site, the following mitigation measures are required:

- If applied by ground, leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.
- If applied by air, leave an untreated buffer zone of 170 feet. Must use straight-stream nozzles (D-6 or larger); wind can be no more than 8 mph, and release height must be 15 feet or less.

To determine whether your county has an endangered species, consult the Web site http://www.epa.gov/espp/usa-map.htm. Endangered Species Bulletins may also be obtained from extension offices or state pesticide agencies. If the bulletin is not available for your specific area, check with the appropriate local state agency to determine if known populations of endangered species occur in the area to be treated.

#### **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 pesticide application.

Observe all cautions and limitations in this label and the labels of products used in combination with **Satellite HydroCap herbicide**. The use of **Satellite HydroCap** not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

**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 protection.

**DO NOT** enter or allow other people (or pets) to enter the treated area until sprays have dried.

# If material is released or spilled:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- · Wash clothing before reuse.
- · Keep the spill out of all sewers and open bodies of water.

#### 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 waterproof material such as butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils
- · Shoes plus socks

# PRODUCT INFORMATION

Satellite HydroCap herbicide is a selective herbicide for controlling most annual grasses and certain broadleaf weeds as they germinate. Table 1 lists the approved crop use sites. Table 2 contains the complete list of controlled weeds. Satellite HydroCap herbicide will not control established weeds.

#### Table 1. Use Sites

alfalfa	fruiting vegetables
artichoke	garlic
asparagus	grain sorghum
bearing and nonbearing fruit and	green onions
nut trees	hops
bearing and nonbearing grape	leafy brassica greens
bearing and nonbearing olive	lentils and peas
trees	melons
bearing and nonbearing small	mint
fruit climbing vines	onions
bermudagrass	peanuts
brassica head and stem	perennial grasses grown for seed
vegetables	potatoes
carrots	rice
carrots grown for seed	soybeans
production	strawberry
corn	sugarcane
cotton	sunflowers
edible beans	tobacco
fallow	vegetable soybean
farmsteads	wheat

#### Table 2. Weeds Controlled

(See crop sections for additional weeds controlled)

Weeds controlled with Satellite HydroCap herbicide APPLIED UP TO 4 PTS/A				
Grasses				
Annual ryegrass*	Italian ryegrass*			
Barnyardgrass	Japanese brome*1			
Canarygrass*2	Johnsongrass (seedling)			
Cheat*2	Jointed goatgrass*1			
Crabgrass	Oat, wild*			
Crowfootgrass	Panicum, fall			
Downy brome*	Panicum, Texas			
Foxtail, giant	Sandbur, field			
Foxtail, green	Shattercane*			
Foxtail, yellow	Signalgrass*			
Goosegrass	Wild proso millet*			
Hairy chess*1	Witchgrass			
Itchgrass*	Woolly cupgrass*			
Broad	lleaves			
Amaranth, Palmer	Mustard, black <sup>2</sup>			
Bugloss, small <sup>1</sup>	Pigweed species			
Carpetweed	Purslane			
Chickweed, common*	Pusley, Florida			
Henbit	Shepherdspurse*			
Kochia	Smartweed, Pennsylvania*			
Lady's thumb	Spurge, annual			
Lambsquarters, common	Velvetleaf*			
Lambsquarters, slimleaf <sup>2</sup>	Waterhemp species			
London rocket*				

Suppression, but controlled when **Satellite HydroCap herbicide** use rate exceeds 4 pts/A.

(continued)

# Table 2. Weeds Controlled (continued)

(See crop sections for additional weeds controlled)

Weeds controlled with Satellite HydroCap herbicide APPLIED AT 4 PTS/A OR GREATER				
	Grasses			
Annual bluegrass	Lovegrass			
Browntop panicum	Sprangletop, Mexican			
Grass, Guinea <sup>2</sup>	Sprangletop, red			
Junglerice Swollen fingergrass				
Broadleaves				
Dodder <sup>†</sup>	Prostrate, knotweed			
Fiddleneck	Puncturevine			
Morningglory**				
† For ontimum dodder control, use the highest laheled rate of				

For optimum dodder control, use the highest labeled rate of Satellite HydroCap herbicide specified in the specific crop.

# **MODE OF ACTION**

Satellite HydroCap herbicide is a meristematic inhibitor that interferes with the plant's cellular division or mitosis. This and/or other products with the meristematic inhibiting mode of action may not effectively control naturally occurring biotypes of some of the weeds listed on this label. A weed biotype is a naturally occurring plant within a given species that has a slightly different, but distinct, genetic makeup from other plants. Other herbicides with the meristematic inhibiting mode of action include other dinitroaniline herbicides, such as trifluralin. If naturally occurring meristematic inhibiting resistant biotypes are present in a field, apply a tank mix of Satellite HydroCap herbicide and/or any other meristematic inhibiting mode of action herbicide or apply sequentially with an appropriate-registered herbicide having a different mode of action to ensure control.

# **APPLICATION RATE**

Use rates for **Satellite HydroCap herbicide** when used alone, in tank mix, or for sequential applications are given in **Crop-specific Information**. Use rates of this product vary by soil texture and organic matter. **Table 3** lists the soil texture groupings referred to in this label.

**Table 3. Soil Texture Groups** 

Sands loamy sands sandy loams
sandy clay loams* sandy clays loams silt loams silts
silty clay loams* silty clays clay loams clays

<sup>\*</sup> These soils are sometimes considered transitional soils and may be classified as either medium-textured or fine-textured soils.

If **Satellite HydroCap herbicide** is used on **peat and muck soils**, weed control may be inconsistent and/or reduced. Use the maximum labeled use rate allowed in the specific crop.

<sup>&</sup>lt;sup>1</sup> Not suppressed or controlled in California

<sup>&</sup>lt;sup>2</sup> Not controlled in California

<sup>\*\*</sup> Suppression

<sup>&</sup>lt;sup>2</sup> Not controlled in California

# **APPLICATION TIMINGS**

**Satellite HydroCap herbicide** will provide most effective weed control when applied by ground or aerial equipment and subsequently incorporated into soil by rainfall, sprinkler irrigation, or mechanical tillage prior to weed seedling germination. **Satellite HydroCap herbicide** can also be applied through chemigation, including flooded basin irrigation systems.

# Satellite HydroCap herbicide may be applied

- · preplant surface,
- · preplant incorporated,
- surface incorporated,
- preemergence,
- early postemergence,
- postemergence incorporated (CULTI-SPRAY)
- layby treatment.

See **Crop-specific Information** for specific application directions and restrictions by crop.

Preplant Surface Application	For use in minimum tillage or no-tillage production systems, apply alone or in tank mixes up to 45 days before planting. When making early preplant surface applications (15 to 45 days prior to
	planting), use a tank mix of <b>Satellite HydroCap herbicide</b> with other herbicides registered for use in a given crop, or follow this application with another postemergence herbicide application. Rainfall or sprinkler irrigation after application is required to move this product into the upper soil surface where weed seeds germinate.
Preplant Incorporated Application	Apply and incorporate into the upper (1 inch to 2 inches) soil surface up to 60 days before planting. Use an implement capable of giving uniform incorporation; two-pass incorporation usually results in a more consistent result.
Surface Incorporated Application	Uniformly apply as a broadcast or banded treatment to soil surface underneath established trees and/or in ground areas between trees rows. Incorporate into upper (1 inch to 2 inches) soil surface using either rainfall, sprinkler irrigation, or shallow mechanical incorporation using an implement capable of giving uniform incorporation; two-pass mechanical incorporation usually results in a more consistent result.
Preemergence Surface Application	Broadcast treatment uniformly onto the soil surface at planting, and up to 2 days after planting. Rainfall, sprinkler irrigation, or shallow mechanical incorporation after application is required to move this product into the upper soil surface where weed seeds germinate. If adequate rainfall or irrigation does not occur, or soil crusting or soil compaction has occurred, and weed seedling emergence begins, a shallow cultivation or rotary hoeing will improve performance. Make sure that crop seeds are below the tilled soil surface area.
Early Postemergence Application	Satellite HydroCap herbicide must be applied prior to weed seedling emergence or in a tank mix with products that control the emerged weeds. Refer to Crop-specific Information for specific postemergence application instructions by crop.
Postemergence Incorporated Application (CULTI-SPRAY)	Prior to application, crop must be cultivated in such a manner as to throw at least 1 inch of soil over the base of the crop plants. This will prevent direct contact of <b>Satellite HydroCap herbicide</b> and the zone of brace root formation. <b>Satellite HydroCap herbicide</b> must be applied broadcast with a ground sprayer when crop is at least 4 inches tall up to layby. Use drop nozzles if crop foliage will prevent uniform coverage of the soil surface within the rows. Thoroughly and uniformly incorporate <b>Satellite HydroCap herbicide</b> treatments into the soil:  1. With a sweep-type or rolling cultivator set to provide thorough incorporation in the top 1 inch of soil, or  2. With adequate overhead irrigation water or rainfall. See <b>Crop-specific Information (Corn</b> and <b>Grain Sorghum)</b> for more details on (CULTI-SPRAY) application.
Layby Application	Apply directly to the soil between rows as a directed spray following the last normal cultivation (layby). See <b>Crop-specific Information</b> for more details on layby application.
Split Application	Apply <b>Satellite HydroCap herbicide</b> -preplant incorporated up to 60 days prior to planting and followed by a preemergence application at planting or up to 2 days after planting. The total amount of <b>Satellite HydroCap herbicide</b> applied per acre per season cannot exceed the highest labeled rate for any given soil type. See <b>Crop-specific Information</b> for more details on split applications.
Fall Application	Use <b>Satellite HydroCap herbicide</b> in fall application programs in certain crops. See <b>Crop-specific Information</b> for details on fall application timing.

#### **SPRAYING INSTRUCTIONS**

Satellite HydroCap herbicide may be applied using either water or sprayable fluid fertilizer (such as straight 32-0-0 or 28-0-0) as the spray carrier. Additionally, Satellite HydroCap herbicide may be impregnated on dry bulk fertilizer. Sprayable fluid fertilizer as a carrier is NOT for use after crop emergence unless the typical fertilizer burn symptoms on the crop are acceptable.

# **Aerial Application**

Uniformly apply in 5 or more gallons of water per acre. Exercise caution to minimize drift. **DO NOT** apply during periods of gusty winds or when wind conditions favor drifting. Spray drift can cause injury to sensitive crops. Use a flagman or an automatic mechanical flagging unit on the aircraft to avoid overlapping and possible crop injury.

# **Ground Application (Broadcast)**

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre or 20 or more gallons of liquid fertilizer per acre. Use sprayers equipped with appropriate nozzles that provide uniform and accurate spray distribution and minimize drift. Keep the bypass line on or near the bottom of the tank to minimize foaming. Nozzle and in-line screens must be no finer than 50 mesh. Application during periods of gusty winds may result in uneven applications. DO NOT apply Satellite HydroCap herbicide postemergence in liquid fertilizers.

If liquid fertilizer/herbicide(s) mixture separates in the spray tank, clogged equipment and uneven application can result. Always predetermine the compatibility of **Satellite HydroCap herbicide** alone or with other herbicides based on the following compatibility jar test:

- 1. Add 1 pint of fertilizer to a quart jar.
- 2. Add 1 to 4 teaspoon(s) of the dry flowable (DF), wettable powder (WP), aqueous solution (AS), flowable (F) or liquid (L) formulation (depending on mixing ratio required) to the liquid fertilizer. Determine the number of teaspoons of the formulation to add by the following formula:

 $\frac{\text{lbs or pts of product/acre}}{\text{gallons of fertilizer/acre}} \quad \text{x} \quad 11.4 \quad = \quad \frac{\text{teaspoons of herbicide to}}{\text{add to 1 pint of fertilizer}}$ 

- 3. Close the jar and agitate until the herbicide(s) are evenly dispersed in the liquid fertilizer. If the materials **DO NOT** disperse well, it may be necessary to slurry the chemicals in water before adding to the fertilizer.
- 4. After dispersing the materials, add appropriate number of teaspoons of Satellite HydroCap herbicide to the jar and shake well. Add water soluble concentrate herbicides to the mixture last and agitate. Let the mixture stand for 30 minutes; then observe the results. Look for signs of separation: an oily layer or globules, sludge, flakes or other precipitates.
- 5. Evaluate compatibility.
  - a. If the herbicide(s) and liquid fertilizer mixture does not separate, use this mixture in your spray tank.
  - b. If the mixture separates but mixes readily with shaking, the mixture can be used provided that good agitation is maintained in the spray tank.
  - c. If separation of the mixture occurs and agitation does not correct this problem, a compatibility agent is needed.
- 6. If the need for a compatibility agent is demonstrated, UPI recommends the following procedure: Using a clean quart jar, repeat step 1 above and add 1/2 teaspoon of the compatibility agent to the liquid fertilizer. Mix well and repeat steps 2, 3 and 4. If separation or precipitation occurs with the compatibility agent, **DO NOT** use **Satellite HydroCap herbicide** with that specific liquid fertilizer.

# **Ground Application (Band)**

Uniformly apply the broadcast equivalent rate and volume per acre. To determine:

band width in inches	~	broadcast rate	_	band rate
row width in inches	^	per acre	_	per acre
band width in inches	V	broadcast volume	_	band volume
row width in inches	X	per acre	=	per acre

# **Ground Application (Dry Bulk Fertilizer)**

Apply **Satellite HydroCap herbicide**/dry bulk fertilizer mixtures only with ground equipment. **DO NOT** impregnate **Satellite HydroCap herbicide** onto coated ammonium nitrate or limestone because these materials will not absorb the herbicide. Dry fertilizer blends containing mixtures of ammonium nitrate or limestone may be impregnated with **Satellite HydroCap herbicide**. A minimum of 200 pounds of impregnated dry bulk fertilizer, excluding the weight of ammonium nitrate or limestone, must be applied per acre

Use the following formula to determine the amount of **Satellite HydroCap herbicide** to be impregnated on a ton of dry bulk fertilizer based on the rate of fertilizer to be applied per acre:

2000		Satellite HydroCap		Satellite HydroCap
pounds of dry	Χ	herbicide	=	herbicide
fertilizer per acre		(rate per acre)		per ton of fertilizer

To impregnate **Satellite HydroCap herbicide** on bulk fertilizer, use a closed rotary-drum mixer or other commonly used dry bulk fertilizer blender equipped with suitable spray equipment. Spray nozzles must be placed to provide uniform coverage of **Satellite HydroCap herbicide** onto the fertilizer during mixing.

Apply the **Satellite HydroCap herbicide**/dry bulk fertilizer mixture with an accurately calibrated dry fertilizer spreader. The **Satellite HydroCap herbicide**/dry bulk fertilizer mixture must be spread uniformly on the soil surface.

# Chemigation Application via Sprinkler Irrigation and Drip Irrigation Systems

Satellite HydroCap herbicide may be applied as a chemigation treatment through sprinkler irrigation and drip irrigation systems. Refer to Cropspecific Information sections for individual crops. DO NOT apply Satellite HydroCap herbicide via chemigation to crops unless specified in Cropspecific Information section.

Apply this product **ONLY** through a sprinkler irrigation system of the following type: center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move.

Apply this product **ONLY** through a drip irrigation system that has emitters above the soil surface.

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

Uniform distribution of **Satellite HydroCap herbicide**-treated irrigation water is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness or illegal pesticide residues in the crop. If you have any questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts.

The system must be properly calibrated (with water only) to ensure that the amount of **Satellite HydroCap herbicide** applied corresponds to the specified rate. Apply **Satellite HydroCap herbicide** in 1/2 to 3/4 inch of water during the first sprinkler set (use at least 1 inch of water in the states of **New Mexico**, **Oklahoma** and **Texas**). UPI recommends that **Satellite HydroCap herbicide** is mixed with water at a 1:1 ratio in the injection nurse tank to assist with product flowability. Maintain agitation in the injection nurse tank to keep a uniform herbicide suspension during application. When application is complete, flush the system with water.

# Chemigation Instructions (for low-volume micro sprinklers)

Output of low-volume sprinkler equals 4 to 50 gallons per hour (gph) per emitter. Point of application **MUST** be above ground.

Run the irrigation system a sufficient amount of time prior to **Satellite HydroCap herbicide** 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 **Satellite HydroCap herbicide**-treated water. Add **Satellite HydroCap herbicide** to the supply tank already filled with the volume of water required for the injection period. Maintain proper agitation in **Satellite HydroCap herbicide** injection tank. Mix **Satellite HydroCap herbicide** in clean water and inject down-line from filters. Following **Satellite HydroCap herbicide** injection, flush system for a period of time sufficient to clear the line of **Satellite HydroCap herbicide**. (If **Satellite HydroCap herbicide** is applied during a normal irrigation cycle, make injection 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 **Satellite HydroCap herbicide**, use the following formula:

- 1. Treated area per each emitter = A A = 3.14 x (radius x radius)
- 2. The area in square feet wet in each acre = B  $B = \underbrace{A \times emitters/acre}_{144}$
- The total area (in square feet) wet by your system = C
   C = B x acres covered by system
- 4. Rate per treated acre of **Satellite HydroCap herbicide** (based on length of control desired) = R

Amount of Satellite HydroCap herbicide to inject = S

 $S = \frac{C}{43,560} \ x \ R = qts \ of \ \textbf{Satellite HydroCap herbicide}$ 

# Example:

If the average distance from emitter to perimeter of wetted area measured 1 inch below soil surface is 13 inches, then

 $A = 3.14 \times (13 \text{ inches} \times 13 \text{ inches})$  and A = 530.7 square inches

If there are 300 emitters per acre, then

 $B = \frac{530.7 \times 300}{144}$  and B = 1105.6 square feet wetted per acre

If the system covers 20 acres, then

C = 1105.6 square feet per acre x 20 acres and

C = 22,112 square feet wetted by system

If the desired application rate per treated acre is 2.0 qts of **Satellite HydroCap herbicide**, then

 $S = 22,112 \times 2.0$  and S = 1.0 qt = amount of **Satellite HydroCap herbicide** to inject into the system

# **Special Precautions for Chemigation**

- DO NOT apply when wind speed favors drift beyond the area intended for treatment.
- DO NOT connect an irrigation system used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.
- 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.
- 4. Tail water (runoff water) from chemigation that contains Satellite HydroCap herbicide should be recirculated and/or contained in the field in a cistern or holding reservoir from the initial application and/or used only on adjacent, approved crops for which Satellite HydroCap herbicide is registered for this type of application.
- 5. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. It 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.
- 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. In addition, 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.
- 7. The sprinkler chemigation 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.
- 8. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

# **Chemigation Systems Connected to Public Water Systems**

- 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.
- All chemigation systems connected to public water systems must also follow restrictions listed in the preceding section titled Chemigation.

# Applications via Flood, Flooded Basin, or Gravity Flow Irrigation Systems

**Satellite HydroCap herbicide** may be applied via flood, flooded basin, or gravity flow irrigation systems, but only to the following crops: bearing and nonbearing fruit and nut trees, bearing and nonbearing olive trees, bearing and nonbearing vineyards, and alfalfa.

# Use Instructions and Precautions for Flood, Flooded Basin, and Gravity Flow Irrigation

- Satellite HydroCap herbicide may be applied through flood, flooded basin, or gravity flow irrigation systems designed to uniformly distribute irrigation water along the soil surface. Solid set systems utilizing tall riser for overhead application are excluded.
- Follow all label directions for Satellite HydroCap herbicide regarding rates per acre, timing of application, and crop-specific restrictions and limitations.
- DO NOT connect an irrigation system used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.
- 4. 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.
- 5. UPI recommends that **Satellite HydroCap herbicide** is mixed with water at a 1:1 ratio in the injection nurse tank to assist with product flowability. Maintain agitation in the injection nurse tank to keep a uniform herbicide suspension during application. When application is complete, flush the system with water.
- 6. Systems using a gravity-flow pesticide dispensing system must meter the pesticide in the water at the head of the field downstream of a hydraulic discontinuity, such as a drop structure or weir box, to decrease potential for water source contamination from backflow water.
- 7. Tail water (runoff water) from flood, flooded basin, or gravity flow irrigation that contains Satellite HydroCap herbicide should be recirculated and/or contained in the field in a cistern or holding reservoir from the initial application and/or used only on adjacent approved crops for which Satellite HydroCap herbicide is registered for this type of application.
- 8. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located in the irrigation pipe to prevent water source contamination from backflow.
  - The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent flow of fluids back toward the injection pump.
  - 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.
  - The system must contain a functional interlocking control to automatically shut off the pesticide injection pump when the water pump stops.
  - The irrigation pipe or water pump must include a functional pressure switch, which will stop the pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) of effective design and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
  - Any alternative to the above safety devices must conform to the list of EPA-approved alternative devices.

- 9. Be sure to regularly measure the flow in the field to ensure the correct amount of **Satellite HydroCap herbicide** is metered into the irrigation water and also regularly monitor to ensure that treated water is uniformly distributed across the field. Flow rates through metering devices and distribution of **Satellite HydroCap herbicide** can vary with water temperature and speed of water flow across the field.
- 10. Uniform distribution of Satellite HydroCap herbicide-treated irrigation water is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness, or illegal pesticide residues in the crop.
- 11. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

#### MANAGING SPRAY DRIFT

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

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops:

- 1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the fixed wingspan or rotor blade diameter.
- 2. Nozzles must always point backward parallel with the airstream and never be pointed downward more than 45 degrees.

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

The applicator must be familiar with and take into account the information covered in the following spray drift reduction advisory information.

# **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 recommended pressures. For many nozzle types, lower pressure produces larger droplets. When high 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 airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the 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- or straight-stream nozzles oriented straight back produce the largest droplets and the lowest drift. Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### **Application Height**

Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind. Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. **DO NOT** apply with a nozzle height greater than 4 feet above the crop canopy (for ground application).

#### **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind 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 droplets, etc.).

#### Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. Apply only when the wind speed is 2 to 10 mph at the application site. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential.

**NOTE:** 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**

Applications shall not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing that causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions because of 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 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.

#### **Sensitive Areas**

This pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or nontarget crops or plants) is minimal (e.g. when wind is blowing away from the sensitive areas). **DO NOT** apply when wind conditions will allow the drift to adjacent, susceptible crops.

### **SPRAY ADDITIVES**

Spray adjuvants have little or no influence on performance of **Satellite HydroCap herbicide** when applications are made prior to weed emergence. However, several tank mixes with **Satellite HydroCap herbicide** require adjuvants to improve burndown of emerged weeds. Therefore, surfactants, liquid fertilizer (28%, 30%, or 32% UAN [urea ammonium nitrate] or AMS [ammonium sulfate]), or crop oil concentrate may be used with **Satellite HydroCap herbicide** tank mixes applied preplant, preemergence, or early postemergence to the crop. Follow the adjuvant directions on the tank mix partner's label. The adjuvants must contain ingredients accepted by the Environmental Protection Agency.

When an adjuvant is to be used with this product, UPI recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

#### TANK MIXES

**Satellite HydroCap herbicide** may be applied in a tank mix or a sequential application with other herbicides registered for use in a given crop. Refer to the companion label for weeds controlled in addition to **Satellite HydroCap herbicide** alone.

When using tank mixtures or sequential applications with **Satellite HydroCap herbicide**, always read the companion product label(s) to determine the specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow all precautions and restrictions including state and local use restrictions that may apply to specific products. Always follow the most restrictive label.

#### **Tank Mixes with Other Products**

Always perform a mixing test to check the compatibility of **Satellite HydroCap herbicide** with all potential tank mix partners.

#### **Mixing Instructions**

Fill tank 1/2 to 3/4 full with clean water or liquid fertilizer and agitate.
 Prior to mixing Satellite HydroCap herbicide or tank mixtures in liquid fertilizer, refer to appropriate label sections for specified uses in liquid fertilizer, application instructions, and compatibility determinations.

**NOTE: Satellite HydroCap herbicide** will **NOT** mix in high salt formulation fertilizers, such as 10-34-0. When utilizing high salt formulation fertilizers as the spray carrier, use one of the following:

- a. Pre-slurry Satellite HydroCap herbicide in water prior to adding to tank; use 1:1 ratio of water to Satellite HydroCap herbicide.
- b. Add water to fertilizer solution prior to adding Satellite HydroCap herbicide. The amount of water must be equal to or greater than the amount of Satellite HydroCap herbicide to be used.

#### 2. Satellite HydroCap herbicide Alone

When using **Satellite HydroCap herbicide** alone, add **Satellite HydroCap herbicide** to the partially filled tank while agitating; then fill the remainder of the tank with water or liquid fertilizer.

#### 3. Satellite HydroCap herbicide Tank Mixes

Add the tank mixture ingredients in the following order before adding **Satellite HydroCap herbicide**:

- a. Wettable Powder (WP) formulations. Make a slurry of the WP in water (1:2 ratio). Add the slurry slowly into the partially filled tank while agitating.
- b. Dry Flowable (DF)/Water-dispersible Granule (WDG) formulations. Add the granules to the partially filled tank while agitating. Make a slurry of the granules in water before adding to liquid fertilizer.
- c. Flowable (F) formulations. Add the F formulation to the partially filled tank while agitating.
- Add Satellite HydroCap herbicide to the partially filled tank while agitating.
- e. Water-soluble Concentrate (WSC) formulations. Add the WSC formulation to the partially filled tank while agitating.
- f. Emulsifiable Concentrate (EC) formulations. Add the EC formulation to the partially filled tank while agitating.

Fill the remainder of the tank with water or liquid fertilizer while agitating.

4. Thorough and continuous sprayer-tank agitation MUST be maintained during mixing and spraying of **Satellite HydroCap herbicide**. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed.

# **Cleaning Spray Equipment**

Follow the manufacturer's directions to clean application equipment thoroughly using a strong detergent or commercial spray cleaner. After cleaning, triple rinse the equipment before and after applying this product.

#### RESTRICTIONS AND LIMITATIONS

- DO NOT exceed the maximum labeled rate for any soil type.
- Satellite HydroCap herbicide will not control established weeds. Destroy
  emerged weeds prior to application.
- Satellite HydroCap herbicide is most effective in controlling weeds mechanically incorporated or when incorporated into the weed germination zone by adequate rainfall or overhead irrigation after application.
- When using tank mixtures with Satellite HydroCap herbicide, always read the companion product label(s) to determine the specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow all precautions and restrictions including state and local use restrictions that may apply to specific products. Follow all precautions and restrictions on the labels of all products applied in combination with Satellite HydroCap herbicide. Always follow the most restrictive label.
- In the event of a crop loss due to adverse weather conditions or other reasons, any crop registered for a preplant incorporated application of Satellite HydroCap herbicide can be replanted without adverse effects the same year (see Crop-specific Information for exceptions). If replanting is necessary, DO NOT work the soil deeper than the treated zone.
- Refer to Crop-specific Information for crop-specific preharvest intervals and feeding and grazing restrictions.

#### **Crop Rotation Restrictions**

- Use of Satellite HydroCap herbicide in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors, such as arid conditions, make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible. Soil characteristics and environmental conditions which may contribute to crop stress that may be accentuated by the use of Satellite HydroCap herbicide include: coarse soils, compaction, high salinity, eroded knolls/hilltops, cold and/or wet soils, drought, and heavy rainfall soon after application.
- When Satellite HydroCap herbicide is used in tank mix or sequential combinations, refer to label of other herbicides for additional rotational crop restrictions.
- Restrictions for rotational cropping after the use of Satellite HydroCap herbicide are dependent on the application use rate of Satellite HydroCap herbicide in the primary crop. The user must thoroughly read the following restrictions to determine the rotational crops for their specific situation, according to application use rate.

# Rotational Crop Restrictions following Satellite HydroCap herbicide Applications to Field and Row Crops

#### 1. Application Rate less than or equal to 4 pts/A (1.9 lbs ai/A)

- a. Crops labeled for preplant incorporated application may be planted the same season Satellite HydroCap herbicide was applied.
- b. Sugar beets, Red beets and Spinach: To avoid crop injury, DO NOT plant sugar beets, red beets or spinach for 12 months following a spring application of this product or 14 months following a fall application of this product.

If rainfall or irrigation was not sufficient to produce a crop, these crops must not be planted for 18 months following a spring application of this product or 20 months following a fall application of this product. Plow the land using a moldboard plow to a depth of 12 inches to ensure thorough mixing of soil prior to planting sugar beets, red beets and spinach.

#### c. Proso millet, Sorghum (Milo), and Annual or Perennial grass crops or mixtures

Proso millet, sorghum (milo), and annual or perennial grass crops or mixtures must not be planted for 10 months after a spring application of **Satellite HydroCap herbicide** or 12 months after a fall application of **Satellite HydroCap herbicide**, except in the following conditions:

In the states of **Minnesota**, **North Dakota** and **South Dakota**, these crops must not be planted for 18 months following a spring application of this product or 21 months following a fall application of this product.

If rainfall or irrigation was not sufficient to produce a field or row crop, to avoid the possibility of crop injury in areas that receive less than 20 inches of rainfall or irrigation to produce a crop, these crops must not be planted for 18 months following a spring application of this product or 20 months following a fall application of this product.

#### d. Wheat and Barley in Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, Oregon, Utah, Washington and Wyoming

Wheat and barley may be planted 4 months after an application of **Satellite HydroCap herbicide** applied at rates less than or equal to 3.2 pts/A (1.52 lbs ai/A) with normal rainfall and/or irrigation. Following harvest of furrow-irrigated crops, thoroughly mix the soil by plowing or deep disking to minimize the potential for herbicide carryover to the following crop. For **Satellite HydroCap herbicide** application rates greater than 3.2 pts/A but less than or equal to 4.0 pts/A, follow the wheat and barley crop rotation guidelines listed in section **e. Wheat and Barley in All Other States**.

#### e. Wheat and Barley in All Other States

Wheat and barley may be planted 4 months after an application of **Satellite HydroCap herbicide**, except under the following conditions: If less than 12 inches of rainfall or overhead irrigation was received between application and rotational crop planting, wheat must not be planted before 12 months after a spring application of this product or 14 months after a fall application of this product.

In dryland areas and/or areas where irrigation is necessary to produce the crop treated with **Satellite HydroCap herbicide**, **DO NOT** plant winter wheat or barley as a follow crop if crop failure/destruction occurs and land is fallowed during the summer.

#### f. All Other Rotational Crops Not Specifically Addressed Above

Crops, other than those to which **Satellite HydroCap herbicide** may be applied as a preplant incorporated treatment, may be planted the year following application of **Satellite HydroCap herbicide**, except under the following condition:

If rainfall or irrigation was not sufficient to produce a crop, delay planting for 18 months following a spring application of this product or 20 months following a fall application of this product.

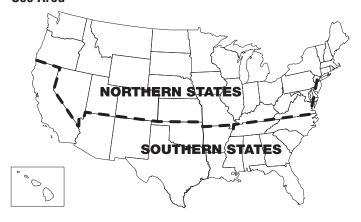
# 2. Application Rate greater than 4 pts/A (1.9 lbs ai/A)

In the growing season following application of **Satellite HydroCap herbicide** to field and row crops at greater than 4 pts/A, plant only those crops for which **Satellite HydroCap herbicide** is labeled for preplant incorporated treatment or crop injury may occur. **DO NOT** plant other crops for 24 months.

# Rotational Crop Restrictions following Satellite HydroCap herbicide Applications to Orchard, Grove, and Vineyard Crops

In the growing season following application of **Satellite HydroCap herbicide** to bearing fruit and nut trees, olive trees, or grapes, plant only those crops for which **Satellite HydroCap herbicide** is labeled for preplant incorporated treatment or crop injury may occur. **DO NOT** rotate to other crops (except for nut crops, fruit trees, olive trees, or grapes) for 24 months following an application of this product to bearing fruit or nut trees, olive trees, or grapes.

#### Use Area



#### **CROP-SPECIFIC INFORMATION**

Crop Injury. Satellite HydroCap herbicide use may result in crop injury, loss or damage to certain crops under a number of conditions, including but not limited to agronomic, cultural, mechanical, and environmental. Numerous risks of loss or damage to certain crops may be associated with the use of Satellite HydroCap herbicide even when directions for use are followed completely. The user or grower must consider all such risks before deciding to apply the product. UPI recommends testing this product on a small portion of the target crop to determine if damage is likely to occur. Each grower who is considering the product for such use should test Satellite HydroCap herbicide to determine its suitability. A grower should use Satellite HydroCap herbicide only to the extent that, in his sole opinion, the benefit of Satellite HydroCap herbicide use outweighs the potential injury to the grower's crop.

In addition, many factors can affect crop growth and/or yield, including but not limited to insects, diseases, weed competition, poor seed quality, improper planting depth, mechanical cultivation, poor weather (such as freezing or excessive wind, rain, heat, or cold), lack of or excessive moisture, crusting, fertility, or hardpans. Risk of loss or damage to crops may be associated with the use of **Satellite HydroCap herbicide** and contribute to poor stands due to failure of crop to emerge, swelling of roots or other below-ground plant parts, less vigorous plant growth and development, and reduction in yield potential. **Satellite HydroCap herbicide** may also cause injury to sensitive rotational crops.

# ALFALFA Grown for Forage, Hay, or Seed

**Application Methods:** Apply by ground, air, chemigation, flood, floodbasin, gravity flow irrigation systems, or on dry bulk fertilizer.

# **Use Methods, Timings and Use Rates**

Established Alfalfa for Forage/Hay. Apply to established alfalfa grown for forage or hay (defined as alfalfa planted in the fall or spring which has gone through a first cutting/mowing). Apply in a single application or in sequential applications. Uniformly apply at a broadcast rate of 1.1 to 4.2 quarts per acre prior to weed germination. Applications can be made in the fall after the last mowing/cutting, during winter dormancy, in the spring, or between cuttings. Make applications prior to the alfalfa reaching 6 inches in regrowth.

Established Alfalfa Grown for Seed Production. Apply to established alfalfa grown for seed production (defined as alfalfa planted in the fall or spring which has gone through a summer season of cutting/mowing). Uniformly apply at a broadcast rate of 1.1 to 4.2 quarts per acre prior to weed emergence in one of the following ways:

- Apply to dormant established alfalfa.
- Apply before alfalfa exceeds 10 inches in height after first mowing/beating.

 When the alfalfa reaches 10 inches in height or if the alfalfa has been mowed/beaten 2 or more times, Satellite HydroCap herbicide must be applied with drop nozzles directing the spray so that there is little to no contact with the foliage.

<u>Seedling Alfalfa.</u> Apply to seedling alfalfa grown for forage or hay (defined as alfalfa planted in the fall or spring which has **NOT** gone through a cutting/mowing). Uniformly apply at a broadcast rate of **1.1 to 2.1 pints per acre** prior to weed germination. Applications can be made when the seedling alfalfa has reached the second trifoliate stage of growth. Make applications prior to the alfalfa reaching 6 inches in growth.

Alfalfa Stand Establishment. Apply at a broadcast rate of 1.0 to 1.5 pints per acre as a preplant incorporated or preemergence treatment in direct-seeded alfalfa. Some crop stand reduction and stunting may occur with this use of Satellite HydroCap herbicide; however, reduced weed competition will allow establishment of a quality stand. Use the lower rates on coarse texture soil or in lower rainfall areas (receiving less than 20 inches of rainfall and irrigation a year).

- Preplant-incorporated. Uniformly incorporate Satellite HydroCap herbicide into the top 2 to 3 inches of the final seedbed prior to planting.
- Preemergence. Apply directly after drill seeding alfalfa. Plant alfalfa into a seedbed that is firm and free of clods.

#### **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

# Flood, Flooded Basin, and Gravity Flow Irrigation Systems

Apply **Satellite HydroCap herbicide** in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions and precautions about flood, flooded basin, and gravity flow irrigation systems in the **Spraying Instructions** section of this label.

#### **Restrictions and Limitations**

- **DO NOT** exceed 4.2 quarts of per acre in a single application.
- For multiple applications, **DO NOT** exceed a cumulative total of 4.2 quarts of per acre in any one-crop season.
- **DO NOT** harvest alfalfa forage or hay less than **28 days** after applying 2.1 quarts or less of **Satellite HydroCap herbicide**.
- DO NOT harvest alfalfa forage or hay less than 50 days after applying more than 2.1 quarts of Satellite HydroCap herbicide.
- **DO NOT** utilize the **28-day** preharvest interval for alfalfa hay more than once per cropping season.
- **DO NOT** apply less than 90 days prior to alfalfa harvest for seed.
- Some stunting and chlorosis of the alfalfa may occur with postemergence applications.
- Applications made after the alfalfa exceeds 6 inches in height may result in poor weed control because of possible reduced spray coverage to the soil.

# **ARTICHOKE**

**Application Methods:** Apply by ground or air.

# **Use Methods, Timings and Use Rates**

With a single application, uniformly apply to artichokes up to **3.0 pints per acre** as a broadcast spray to the soil surface at least 60 days prior to harvest, or uniformly apply to artichokes from **3.1 to 8.2 pints per acre** as a broadcast spray to the soil surface at least 200 days prior to harvest. Application must be made pretransplant to artichoke, at no less than 1 to 2 days prior to transplanting.

#### **Restrictions and Limitations**

- DO NOT apply postemergence over the top of or to foliage of artichoke because severe injury may occur.
- **DO NOT** apply more than 3.0 pints per acre per season when utilizing the 60-day preharvest interval.
- If more than 3.0 pints per acre (up to 8.2 pints per acre) is applied,
   DO NOT harvest artichoke until 200 days after application.
- DO NOT apply more than 8.2 pints per acre per season.
- DO NOT feed forage or graze livestock in treated fields.

#### **ASPARAGUS**

Application Methods: Apply by ground or air.

### **Use Methods, Timings and Use Rates**

Apply only to established asparagus, or to newly planted crown asparagus. **DO NOT** apply to newly seeded asparagus. When applying to newly planted crown asparagus, assure crowns are fully covered with 2 to 4 inches of soil.

With a single application, uniformly apply to asparagus up to **8.2 pints per acre** as a broadcast spray to the soil surface at least 14 days prior to the first spear harvest or after seasonal harvest is complete. Application must be made prior to spear emergence or remove emerged spears prior to making the application. If asparagus is grown on sandy soils, **DO NOT** apply **Satellite HydroCap herbicide** at more than 2.4 pts/A.

#### **Restrictions and Limitations**

- DO NOT apply postemergence over the top of emerged spears as severe injury may occur.
- DO NOT apply more than 8.2 pints per acre per season.
- DO NOT apply within 14 days before harvest.
- DO NOT feed forage or graze livestock in treated fields.
- DO NOT apply by chemigation methods.

# **BEARING AND NONBEARING FRUIT AND NUT TREES**

Satellite HydroCap herbicide may be applied in the following individual crops within the fruit tree and tree nut crop groupings:

Citrus Fruit Crop Group				
calamondin	lime			
citrus citron	mandarin (tangerine)			
citrus hybrids	orange (sweet and sour)			
grapefruit	pummelo			
kumquat	satsuma mandarin			
lemon	tangelo			

Tree Nut Crop Group		
almond	filbert (hazelnut)	
beech nut	hickory nut	
Brazil nut	macadamia nut	
butternut	pecan	
cashew	pistachio	
chestnut	walnut	
chinquapin		

Pome Fruit Crop Group		
apple crabapple loquat mayhaw	pear pear, oriental quince	

Stone Fruits Crop Group	
apricot	plum, chicksaw
aprium	plum, Damson
cherry, sweet	plum, Japanese
cherry, tart	plumcot
nectarine	pluot
peach	prune
plum	

Other Fruit Trees	
juneberry	pomegranate

**Application Methods:** Apply by ground, chemigation, flood, flooded basin, and gravity flow irrigation systems.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** either in a single application or sequentially with an interval of 30 days or more. Apply between **2.0 to 6.3 quarts per acre** depending on the grower's weed control program, level of weed infestation, and desired use strategy (see following chart). Do not exceed a total of 4.2 quarts/A per year in pome, stone and other fruit trees, and not to exceed a total of 6.3 quarts/A per year in citrus and nut trees.

#### Satellite HydroCap herbicide Use Rate per Acre

Low Use Rate	High Use Rate
2.0 quarts	4.0 to 6.3 quarts

# **Ground Applications (Bearing)**

Use Satellite HydroCap herbicide as a surface incorporated or (surface) preemergence application.

Apply as a broadcast or banded treatment using ground equipment before weed germination. Apply the spray directly to the ground beneath the trees and/or in areas between rows. **DO NOT** apply over the top of trees with leaves or buds or fruit. Contact by the spray mixture with leaves, shoots, or buds may cause injury.

# **Ground Applications (Nonbearing)**

Apply **Satellite HydroCap herbicide** for preplant incorporated, preplant surface, surface incorporated or preemergence weed control in non-bearing fruit and nut tree crops. Use **Satellite HydroCap herbicide** before or after transplanting the nonbearing crops.

<u>Preplant surface.</u> Prior to transplanting, uniformly apply with ground equipment. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

<u>Preplant Incorporated.</u> Uniformly apply prior to transplanting but before weeds germinate. Incorporate **Satellite HydroCap herbicide** to a depth of 1 to 2 inches. Application and incorporation must be made prior to transplanting to avoid mechanical injury to the crop. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

Preemergence. Applications may be in a band or broadcast.

#### Chemigation Applications

Apply **Satellite HydroCap herbicide** through sprinkler irrigation and drip irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label. **DO NOT** apply **Satellite HydroCap herbicide**-treated irrigation water over top of trees with leaves or buds or fruit. Contact with leaves, shoots, or buds by spray mixture may cause injury.

#### Flood, Flooded Basin, and Gravity Flow Irrigation Systems

Apply **Satellite HydroCap herbicide** in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions and

precautions about flood, flooded basin, and gravity flow irrigation systems in the **Spraying Instructions** section of this label.

#### **Restrictions and Limitations**

- DO NOT apply more than 4.2 quarts of per acre per year in pome, stone and other fruit trees.
- DO NOT apply more than 6.3 quarts of per acre per year in citrus and nut trees.
- DO NOT apply by air.
- DO NOT feed forage or graze livestock in treated groves or orchards.
- **DO NOT** apply within 1 day of harvest of citrus fruit.
- DO NOT apply within 60 days before harvest of pome and stone fruit, nuts
  or other tree fruit.
- DO NOT apply to newly seeded nursery stock.

#### **BEARING AND NONBEARING GRAPE**

**Application Methods:** Apply by ground, chemigation, flood, flooded basin, or gravity flow irrigation systems.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** either in a single application or sequentially with an interval of 30 days or more. Uniformly apply in bearing grape vineyards up to **6.3 quarts per acre** depending on the grower's weed control program, level of weed infestation, and desired use strategy.

#### Satellite HydroCap herbicide Use Rate per Acre

Low Use Rate	High Use Rate
3.2 quarts	6.3 quarts

Apply **Satellite HydroCap herbicide** any time after fall harvest, during winter dormancy, and in the spring.

# **Ground Applications (Bearing)**

Use Satellite HydroCap herbicide as a surface incorporated or (surface) preemergence application.

Apply as a broadcast or banded treatment using ground equipment before weed germination. Apply the spray directly to the ground beneath the grape vines and/or in areas between rows. **DO NOT** apply over the top of grape vines with leaves or buds or fruit. Contact with leaves, shoots, or buds by the spray mixture may cause injury.

# **Ground Applications (Nonbearing)**

Apply **Satellite HydroCap herbicide** for preplant incorporated, preplant surface, surface incorporated or preemergence weed control in non-bearing vineyards. Use **Satellite HydroCap herbicide** before or after transplanting.

<u>Preplant surface.</u> Prior to transplanting, uniformly apply with ground equipment. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

<u>Preplant Incorporated.</u> Uniformly apply prior to transplanting but before weeds germinate. Incorporate **Satellite HydroCap herbicide** to a depth of 1 to 2 inches. Application and incorporation must be made prior to transplanting to avoid mechanical injury to the crop. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

**Preemergence.** Make applications in a band or broadcast.

# **Nonbearing Grape**

#### For Newly Transplanted and One-year-old Grapevines:

- Apply only to dormant grapevines.
- DO NOT apply if buds have started to swell. Application after buds have started to swell may result in leaf distortion.

 DO NOT apply to newly transplanted trees or vines until ground has settled and no cracks are present.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation and drip irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label. **DO NOT** apply **Satellite HydroCap herbicide**-treated irrigation water over the top of grape vines with leaves, or buds, or fruit.

# Flood, Flooded Basin, and Gravity Flow Irrigation Systems

Apply **Satellite HydroCap herbicide** in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions and precautions about flood, flooded basin, and gravity flow irrigation systems in the **Spraying Instructions** section of this label.

#### **Restrictions and Limitations**

- DO NOT apply over the top of grape vines with leaves, or buds, or fruit.
- . DO NOT apply by air.
- DO NOT apply more than 6.3 quarts per acre per year (a single growing season).
- **DO NOT** apply within 90 days before harvest of fruit.
- **DO NOT** feed forage or graze livestock in treated vineyards.

#### **BEARING AND NONBEARING OLIVE TREES**

**Application Methods:** Apply by ground, chemigation, flood, flooded basin, or gravity flow irrigation systems.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** in a single application or sequentially with an interval of 30 days or more. Uniformly apply **2.0 to 4.2 quarts per acre** (depending on desired length of control, see following chart). Do not exceed a total of 4.2 quarts/A per year in olive trees.

#### Satellite HydroCap herbicide Use Rate per Acre

Low Use Rate	High Use Rate
2.0 quarts	4.2 quarts

### **Ground Applications**

Use Satellite HydroCap herbicide as a surface incorporated or (surface) preemergence application.

Apply as a broadcast or banded treatment using ground equipment before weed germination. Direct the spray to the ground beneath the trees and/or in areas between rows. **DO NOT** apply over the top of trees with leaves, buds, or fruit. Contact with leaves, shoots, or buds by spray mixture may cause injury.

#### **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler and drip irrigation systems. Follow all directions, special instructions and precautions about chemigation in **Spraying Instructions** section of this label. **DO NOT** apply **Satellite HydroCap herbicide**-treated irrigation water over the top of trees with leaves, buds, or fruit.

# Flood, Flooded Basin, and Gravity Flow Irrigation Systems

Apply **Satellite HydroCap herbicide** in flood, flooded basin, and gravity flow irrigation systems. Follow all directions, special instructions and precautions about flood, flooded basin, and gravity flow irrigation systems in the **Spraying Instructions** section of this label.

#### **Restrictions and Limitations**

- **DO NOT** apply more than 4.2 quarts per acre per year in olive trees.
- DO NOT apply by air.
- DO NOT feed forage or graze livestock in treated groves or orchards.
- DO NOT apply within 60 days before harvest of olives.
- DO NOT apply to newly seeded nursery stock.

# BEARING AND NONBEARING SMALL FRUIT CLIMBING VINES

Amur River Grape, Gooseberry, Kiwifruit (fuzzy, hardy), Maypop, Schisandra Berry

**Application Methods:** Apply by ground, chemigation, flood, flooded basin, or gravity flow irrigation systems.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** either in a single application or sequentially with an interval of 30 days or more. Uniformly apply in small fruit climbing vines up to **4.2 quarts per acre** depending on the grower's weed control program, level of weed infestation, and desired use strategy.

#### Satellite HydroCap herbicide Use Rate per Acre

Low Use Rate	High Use Rate
3.2 quarts	4.2 quarts

Apply **Satellite HydroCap herbicide** any time after fall harvest, during winter dormancy, and in the spring.

# **Ground Applications**

Use Satellite HydroCap herbicide as a surface incorporated or (surface) preemergence application

Apply as a broadcast or banded treatment using ground equipment before weed germination. Apply spray directly to the ground beneath small fruit climbing vines and/or in areas between rows. **DO NOT** apply over the top of small fruit climbing vines with leaves, buds, or fruit. Contact with leaves, buds, or fruit by the spray mixture may cause injury.

#### **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation and drip irrigation systems. Follow all recommendations, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label. **DO NOT** apply **Satellite HydroCap herbicide**-treated irrigation water over the top of small fruit climbing vines with leaves, buds, or fruit. Contact with leaves, buds, or fruit by the spray mixture may cause injury.

#### Flood, Flooded Basin, and Gravity Flow Irrigation Systems

Apply **Satellite HydroCap herbicide** in flood, flooded basin, and gravity flow irrigation systems. Follow all recommendations, special instructions, and precautions about flood, flooded basin, and gravity flow irrigation systems in the **Spraying Instructions** section of this label.

#### **Restrictions and Limitations**

- DO NOT apply over the top of small fruit climbing vines with leaves, buds, or fruit.
- DO NOT apply by air.
- DO NOT apply more than 4.2 quarts per acre per year (a single growing season).
- **DO NOT** apply within 60 days before harvest of fruit.
- DO NOT feed forage or graze livestock in treated vines.
- **DO NOT** apply when impregnated onto dry bulk fertilizer in small fruit climbing vines.

#### **BERMUDAGRASS**

and other perennial warm-season grasses

**Application Methods:** Apply by ground, chemigation, or air.

#### **Use Methods, Timings and Use Rates**

Apply only to established (defined as planted in the fall or spring which has gone through a first cutting/mowing) **Bermudagrass and other perennial warm-season grasses when in winter dormancy**.

Apply **Satellite HydroCap herbicide** in fields of Bermudagrass (and other perennial warm-season grasses such as Bahiagrass, buffalograss, switchgrass, and others) grown for hay production and/or grown in pastures for livestock grazing.

Apply prior to target weed germination. Uniformly apply at a broadcast rate of **1.1 to 4.2 quarts** per acre in a single application. As an option, apply in two split applications, with 1/2 the seasonal application rate applied at the onset of winter dormancy, followed by the other 1/2 the seasonal application rate applied just prior to spring greenup. **DO NOT** exceed a cumulative total of 4.2 quarts per acre in any one crop season.

Use the higher application rate where more dense infestations of targeted annual grasses and annual broadleaf weeds are anticipated, or when a longer duration of residual weed control is desired.

Apply **Satellite HydroCap herbicide** in a sequential use program or as a tank mix with other registered herbicides that control emerged weeds.

**Satellite HydroCap herbicide** may cause temporary injury to Bermudagrass and other perennial warm-season grass stands. Disease, extremely cold weather, drought, extensive frost heaving, low or high pH, or salinity may weaken stands and make the crop more susceptible to herbicidal injury.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in **Spraying Instructions** section of this label.

# **Tank Mixes**

Apply **Satellite HydroCap herbicide** as a tank mix with other herbicides labeled for use in Bermudagrass and other perennial warm-season grass fields. UPI recommends testing tank mixes on a small portion of the target crop to determine if damage is likely to occur.

Physical incompatibility, reduced weed control, or crop injury may result from mixing Satellite HydroCap herbicide with other pesticides, additives, or fertilizers.

Applications of postemergence herbicides may cause crop injury, such as stunting or chlorosis of Bermudagrass and other perennial warm-season grasses. Consult with your local distributor or dealer regarding local tank mix options. Always perform a mixing test to check the compatibility of **Satellite HydroCap herbicide** with all potential tank mix partners and fertilizers. Follow all precautions and restrictions on the labels of all products applied in combination with **Satellite HydroCap herbicide**. Always follow the most restrictive label.

#### **Restrictions and Limitations**

- DO NOT apply if surface water is present in the field.
- **DO NOT** exceed a cumulative total of 4.2 quarts per acre per year.
- DO NOT harvest grass hay until 60 days after treatment.
- DO NOT harvest for forage or allow livestock to graze grass until 45 days after treatment.
- Use only on grass grazing areas that are controlled/fenced and livestock are excluded for a minimum restriction period of 45 days after treatment.
- Not for use on rangeland.
- Not for use on cool-season grasses.
- Not for use on sod production fields of Bermudagrass or other coolseason grasses.
- Not for use in California except as directed in supplemental labeling.

# **BRASSICA HEAD AND STEM VEGETABLES**

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Broccoli, Chinese Cabbage (napa), Chinese Mustard Cabbage, Cavalo Broccoli, Kohlrabi

Application Methods: Apply by ground or air.

# **Use Methods, Timings and Use Rates**

Uniformly apply as a preplant surface application prior to transplanting, or as a postemergence application.

Uniformly apply only by ground as a postemergence-directed application to transplanted or established direct-seeded Brassica head and stem vegetables.

**DO NOT** apply prior to direct-seeded Brassica head and stem vegetables. With a single application, apply up to **2.1 pints per acre** to Brassica head and stem vegetables as a broadcast or banded spray to the soil surface at pre-transplant time; or as a broadcast postemergence foliar spray; or as a postemergence-directed spray between vegetable rows. Apply postemergence or postemergence-directed to 2-leaf to 4-leaf vegetable transplants at 1 to 3 days after transplanting, or to the 2-leaf to 4-leaf stage of directseeded vegetable plants.

Apply as a postemergence-directed spray on the soil at the base of Brassica head and stem vegetable plants, beneath plants, and between rows. Avoid direct spray contact with foliage or stems because crop injury may occur. Be sure roots of transplants are established. Following the postemergence-directed spray and when sufficient rainfall or irrigation does not occur, mechanically incorporate to activate the herbicide. Apply **Satellite HydroCap herbicide** prior to weed germination for optimum control. Emerged weeds will not be controlled by this treatment.

#### **Use Rates**

#### Pre-transplant, Postemergence or Postemergence-directed

Soil Texture	Broadcast Rate
Coarse	1.0 to 1.5 pts/A
Medium	1.5 to 2.1 pts/A
Fine	1.5 to 2.1 pts/A

#### **Restrictions and Limitations**

- DO NOT apply more than 2.1 pints per acre per season.
- DO NOT apply within 60 days before broccoli harvest.
- DO NOT apply within 70 days before cabbage or other Brassica head and stem vegetables harvest.
- DO NOT feed forage or graze livestock in treated fields.
- DO NOT apply via chemigation methods.
- Avoid root contact with Satellite HydroCap herbicide-treated soil when
  placing transplants into furrow or hole, or crop injury may occur.
- Avoid overlapping spray patterns because crop injury can occur.
- Not for use in California except as directed in supplemental labeling.

### **CARROTS**

Application Methods: Apply by ground, air, or chemigation.

# **Use Methods, Timings and Use Rates**

<u>Preemergence.</u> Make a single broadcast application at **2.0 pints per acre** as a postplant treatment prior to emergence of the crop and before weed germination. Apply as a preemergence treatment within 2 days after planting.

<u>Layby.</u> Apply **Satellite HydroCap herbicide** only by ground equipment at layby (last mechanical cultivation) at **2.0 pints per acre** as a directed spray to the soil between rows. Apply prior to weed germination. Emerged

weeds will not be controlled by this treatment. **DO NOT** allow the spray to contact carrot plants or injury may occur. **DO NOT** apply layby applications by chemigation or by air.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label. **DO NOT** allow **Satellite HydroCap herbicide**-treated irrigation water to contact carrot plants.

**DO NOT** apply tank mixtures through any type of irrigation system unless the label instructions on chemigation of all products are followed.

#### **Restrictions and Limitations**

- DO NOT apply more than 2.0 pints per acre per season.
- DO NOT apply within 60 days before harvest.
- DO NOT feed forage or graze livestock in treated fields.
- DO NOT apply as a broadcast spray over top of carrots or crop injury may result.
- DO NOT apply layby applications by chemigation or by air.

#### CARROTS GROWN FOR SEED PRODUCTION

Application Methods: Apply only layby with ground equipment.

# **Use Methods, Timings and Rates**

<u>Last Cultivation (Layby)</u>. Apply following the last normal mechanical cultivation (layby) at a rate of **1.0 to 4.0 pints per acre** (on a broadcast basis). Uniformly apply as a directed spray to the soil between rows. **DO NOT** allow the spray to contact carrot plants or injury may occur. Use protective shields to avoid contact with carrot foliage. Use properly calibrated and accurate nozzles and equipment.

Layby applications can be applied to carrots previously treated with herbicides registered in/on carrots. Consult the labels of those herbicides for suggested treatments, rates to be used, and precautions or restrictions for use in carrots and for follow crop restrictions.

#### **Restrictions and Limitations**

- DO NOT apply as a broadcast spray over top of carrots or crop injury may result
- DO NOT apply layby applications by chemigation or by air.
- DO NOT apply within 60 days before carrot seed harvest.
- DO NOT feed, forage or graze livestock in treated fields.
- DO NOT harvest carrots for food or feed use.

#### **Special Crop Use Restrictions**

The pesticide applicator, the producer of the crop, and the seed conditioner must be aware that use of this product according to this labeling is deemed a nonfeed/nonfood use. If the applicator of this pesticide is not the producer, the applicator must provide a copy of this labeling to the producer of the crop. Producers of this crop who use this product, or cause the product to be used on a field they operate, shall provide a copy of this pesticide label to the seed conditioner.

Consequently, no portion of this carrot seed crop, including but not limited to green chop, hay, pellets, meal, whole seed, cracked seed, roots, bulbs, foliage and seed screenings, may be used or distributed for food or feed purposes.

Processed carrot seed from a field treated with this product must bear a specific tag or conspicuous container labeling, or if shipped in bulk, on the shipment invoice or bill of lading, with the following statement: "Not for human consumption or animal feed." All seed screenings from seed processing shall be disposed of in such a manner that the screenings cannot be distributed or used for human food or animal feed purposes.

The seed conditioner shall keep records of screening disposal for three years from the date of disposal and shall furnish the records immediately upon request. Conditioner disposal records shall consist of documentation of on-farm disposal, disposal at a controlled dumpsite, incinerator, composter or other equivalent disposal site and shall include the lot numbers, amount of material disposed of, the grower(s), and the date of disposal.

# CORN Field, Pop, Field Seed, Pop Seed, Fresh Sweet

**Application Methods:** Apply by ground, air or chemigation.

# Use Methods, Timings and Use Rates

Apply **Satellite HydroCap herbicide** in conventional, minimum, or no-till as a preemergence, postemergence, or postemergence incorporated (CULTI-SPRAY) application in field corn.

Apply **Satellite HydroCap herbicide** in conventional tillage as a preemergence or postemergence application in field seed corn, popcorn, popcorn seed corn, and fresh sweet corn.

# Regardless of tillage system, plant corn at least 1-1/2 inches deep and completely cover with soil.

In conventional tillage systems, plant into a seedbed that is firm and free of clods and trash. Use only where adequate tillage is practiced to provide good soil coverage of the corn seed.

In no-till systems, utilize a no-till planter that is capable of planting through crop residue. The use of no-till planters under conditions that **DO NOT** allow good soil coverage of the corn seed can result in reduced crop stand or injury if **Satellite HydroCap herbicide** contacts the germinating corn seed. Check equipment to ensure good seed coverage.

Satellite HydroCap herbicide tank mix combination treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received after application. If cultivation is necessary because of soil crusting or weed germination, use shallow tillage and make certain corn seeds are below the tilled area.

Additional Weeds Controlled. In addition to the weeds listed in TABLE 2, Satellite HydroCap herbicide will control the following weeds in corn with CULTI-SPRAY application: wild proso millet and shattercane.

<u>Preemergence.</u> Apply after planting but before weeds germinate and crop emerges.

**Postemergence.** Apply postemergence up to 30 inches tall field corn (20 to 24 inches tall for pop, seed and fresh sweet corn) or in the V8 growth stage, whichever is more restrictive. If the corn canopy prevents applications from reaching the soil, use drop nozzles and apply as a directed spray.

<u>CULTI-SPRAY.</u> Apply alone or with atrazine when field corn is at least 4 inches tall until last cultivation (layby). **Satellite HydroCap herbicide** plus atrazine must be applied before the field corn reaches 12 inches in height.

**DO NOT exceed 1.2 lbs ai per acre of atrazine, as specified on the atrazine label.** Under situations of low rainfall or soil moisture, when deep germinating weeds such as shattercane or field sandbur are anticipated, mechanical incorporation will provide best results. If cultivation is needed after application and incorporation of **Satellite HydroCap herbicide**, do not make the depth of cut deeper than the depth of cut used to incorporate.

# **Chemigation Applications**

**Satellite HydroCap herbicide** may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

#### **Use Rates**

#### Preemergence or Postemergence Applications

	Organic Matter		
Soil Texture	< 1.5%	1.5% to 3.0%	> 3.0%
Coarse	2.0 pts/A	3.0 pts/A	3.0 pts/A
Medium	3.0 pts/A	3.0 pts/A	4.0 pts/A
Fine	3.0 pts/A	4.0 pts/A	4.0 pts/A

#### **CULTI-SPRAY Applications - Field Corn ONLY**

Soil Texture	Southern States <sup>1</sup>	Northern States <sup>1</sup>
Coarse	1.5 pts/A	2.0 pts/A
Medium	2.0 pts/A	3.0 pts/A
Fine	3.0 pts/A	3.0 pts/A
<sup>1</sup> See <b>Restrictions and Limitations</b> for map of specific states.		

#### **Restrictions and Limitations**

- DO NOT apply in reduced, minimum or no-till fresh sweet corn, seed corn or popcorn.
- DO NOT apply in no-till in California.
- DO NOT apply preplant incorporated.
- DO NOT apply postemergence in liquid fertilizer.
- Livestock can graze or be fed forage from treated corn after 21 days following application.
- Satellite HydroCap herbicide may be applied sequentially in a single crop season as long as the total use rate applied in the crop season does not exceed the highest rate per acre for any given soil type.

#### COTTON

**Application Methods:** Apply by ground, air, or chemigation in conventional, minimum, stale seedbed, or no-till as a preplant surface, preplant incorporated, preemergence, layby or postemergence application in cotton.

#### Use Methods, Timings and Use Rates

Preplant surface, preemergence, layby and postemergence treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received after application. A shallow cultivation is recommended if soil crusting or soil compaction occurs. If weeds begin to germinate or adequate moisture is not received after application, use shallow tillage (rotary hoe or light harrow) and make sure cotton seeds are below tilled area. The use of a postemergence herbicide treatment may be required to control weed escapes at planting or following cotton emergence.

**Additional Weeds Suppressed.** In addition to the weeds listed in **TABLE 2**, **Satellite HydroCap herbicide** will suppress Russian thistle in the state of Arizona.

<u>Preplant Surface.</u> Apply up to 15 days prior to planting. Apply **Satellite HydroCap herbicide** tank mixes and sequential programs as specified under the tank mix section.

<u>Preplant Incorporated.</u> Apply up to 60 days prior to planting, and incorporate. Apply **Satellite HydroCap herbicide** tank mixes and sequential programs as specified under the tank mix section.

<u>Preemergence.</u> Apply at planting or up to 2 days after planting. Apply to a seedbed that is firm and free of clods. Apply **Satellite HydroCap herbicide** tank mixes and sequential programs as specified under the tank mix section.

<u>Preplant Incorporated followed by Preemergence.</u> Apply up to 60 days prior to planting, and incorporate. Apply overlay application of at planting or up to 2 days after planting. The total amount of **Satellite HydroCap herbicide** applied per acre must not exceed the highest labeled rate for a

given soil type. Preplant incorporated and preemergence applications of **Satellite HydroCap herbicide** may be applied with the labeled tank mix herbicide(s).

Layby Application (at last cultivation). Apply directly to the soil between rows as a directed spray following the last normal cultivation (layby). Layby applications can be applied in cotton previously treated with Satellite HydroCap herbicide or any herbicide(s) registered for use in cotton. Consult the labels of those herbicides for suggested treatments, rates to be used, and precautions or restrictions for use in cotton, and for rotation crop restrictions. The total amount of Satellite HydroCap herbicide applied per acre per season must not exceed the highest labeled rate for a given soil type. Glyphosate-containing products may be applied with Satellite HydroCap herbicide at layby in cotton with the Roundup Ready® or glyphosate tolerant gene. DO NOT apply glyphosate-containing products at layby on non-Roundup Ready or glyphosate tolerate cotton.

**Postemergence.** Apply by ground or air as a broadcast over-the-top postemergence application in cotton. Not for use in California except as directed in supplemental labeling.

Postemergence treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received after application. Applications before weeds germinate or after clean cultivation to remove existing weeds are necessary because **Satellite HydroCap herbicide** will not control weeds that are emerged at time of application. The use of a postemergence herbicide treatment is required to control emerged weeds.

Use Satellite HydroCap herbicide alone or tank mixed with Roundup PowerMAX® herbicide (on Roundup Ready cotton or Roundup Ready Flex cotton), Roundup WeatherMAX® herbicide (on Roundup Ready cotton or Roundup Ready Flex cotton) or Liberty® herbicide (on LibertyLink® cotton). When tank mixing Satellite HydroCap herbicide with another herbicide product, always follow the most restrictive labeling. DO NOT tank mix and apply over-the-top postemergence with Dual® herbicide, Staple® herbicide, Sequence® herbicide, Caparol® herbicide or Cotoran® herbicide.

Dry ammonium sulfate (AMS) at 17 lbs/100 gallons of spray solution must be used when tank mixing **Satellite HydroCap herbicide** with **Roundup PowerMAX** or **Roundup WeatherMAX**. Liquid AMS may also be used, but must be used at an equivalent rate to 17 lbs of dry weight AMS/100 gallons of spray solution. A nitrogen replacement should not be used with this tank mix unless specified as acceptable from UPI in writing. An appropriate mixing order is as follows: fill tank to at least 1/2 full with water; then add the following in order: AMS, **Satellite HydroCap herbicide**, **Roundup® herbicide**; then fill the tank to capacity with water.

# Postemergence applications of Satellite HydroCap herbicide on Roundup Ready cotton or Roundup Ready Flex cotton only

Note: The instructions provided for the use of Satellite HydroCap herbicide on Roundup Ready cotton or Roundup Ready Flex cotton are specific to and must only be used with varieties designated as Roundup Ready cotton or Roundup Ready Flex cotton.

Consult and follow the **Roundup PowerMAX** or **Roundup WeatherMAX** labels for their respective rates, application methods, precautions and application timing restrictions.

#### Roundup Ready cotton

Tank mixing Satellite HydroCap herbicide with Roundup PowerMAX or Roundup WeatherMAX (in water): Apply Satellite HydroCap herbicide broadcast postemergence over the top of cotton after cotton reaches the 4- to 5-leaf stage of growth. DO NOT apply prior to reaching the 4-leaf cotton stage or past the 5-leaf stage or significant crop injury and/or yield loss may occur.

#### Roundup Ready Flex cotton

Tank mixing Satellite HydroCap herbicide with Roundup PowerMAX or Roundup WeatherMAX (in water): Apply Satellite HydroCap herbicide broadcast postemergence over the top of cotton after cotton reaches the 4-leaf stage of growth, but not after the 8-leaf stage of growth. Over-the-top applications made before the 4-leaf stage or after the 8-leaf stage of development may result in crop injury and/or yield loss.

# Postemergence applications of Satellite HydroCap herbicide on LibertyLink cotton

**Note:** The instructions provided for the use of **Satellite HydroCap herbicide** on **LibertyLink cotton** are specific to and must only be used with varieties designated as **LibertyLink cotton**.

Consult and follow the Liberty label for the respective rates, application method, precautions and application timing restrictions.

#### LibertyLink cotton

Tank mixing Satellite HydroCap herbicide with Liberty (in water): Apply Satellite HydroCap herbicide broadcast postemergence over the top of cotton after cotton reaches the 4-leaf stage of growth, but not after the 8-leaf stage of growth. Over-the-top applications made before the 4-leaf stage or after the 8-leaf stage of development may result in crop injury and/or yield loss.

# Postemergence applications of Satellite HydroCap herbicide ALONE to all cotton (in water)

Apply **Satellite HydroCap herbicide** broadcast postemergence over the top of cotton after cotton reaches the 4-leaf stage of growth, but not after the 8-leaf stage of growth. Over-the-top applications made before the 4-leaf stage or after the 8-leaf stage of development may result in crop injury and/or yield loss.

Over-the-top postemergence applications of **Satellite HydroCap herbicide** can be applied in cotton previously treated with at-planting soil applications of **Satellite HydroCap herbicide** or any other soil-applied herbicide(s) registered for use in cotton. Consult the labels of those herbicides for suggested treatments, rates to be used, and precautions or restrictions for use in cotton and for rotation crop restrictions. Follow the most restrictive label instructions when using products in combination with soil-applied **Satellite HydroCap herbicide**.

**Precautions:** Postemergence applications of **Satellite HydroCap herbicide** may cause temporary growth reduction and/or leaf discoloration or malformation of cotton following application.

# Restrictions for Postemergence Application of Satellite HydroCap herbicide ALONE to all cotton (in water):

**DO NOT** apply over the top in fluid fertilizer.

**DO NOT** apply in tank mix with any adjuvant, surfactant, oil, or other pesticide (except for cotton insecticides).

**DO NOT** apply in any manner except as described in this label, or crop injury and/or yield reduction may occur.

**DO NOT** apply if cotton is under stress (including stress related to previous pesticide treatments, poor fertilization, environmental conditions and/or pest damage) at time of application. If cotton is under stress (including stress related to previous pesticide treatments, poor fertilization, environmental conditions and/or pest damage) at time of application, **Satellite HydroCap herbicide** may retard cotton recovery and/or adversely affect yield.

<u>Fall Application.</u> Apply **Satellite HydroCap herbicide** for weed control in cotton in the fall, after October 15 (up to 140 days prior to planting cotton) in Arizona, California, Louisiana, Mississippi, New Mexico, Oklahoma and Texas. Apply **Satellite HydroCap herbicide** at the broadcast rate of 2.0 pints per acre on coarse or medium soils and 3.0 pints per acre on fine soils.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

# **Use Rates**

### Preplant, Preemergence and Layby Applications

Soil Texture	Conventional or Minimal Tillage	No-till**
Coarse	1.0 to 2.0* pts/A	2.0 pts/A
Medium	2.0 pts/A	3.0 pts/A
Fine	3.0 pts/A	4.0 pts/A

\* DO NOT exceed 1.6 pts/A on coarse-textured soils in California.
\*\* DO NOT use on soils with more than 3% organic matter.

Postemergence Applications of Satellite HydroCap herbicide Alone or in Tank Mix with Roundup PowerMAX® herbicide, or Roundup WeatherMAX® herbicide, or Liberty® herbicide

Soil Texture	Conventional, Minimal Tillage, or No Tillage
Coarse	1.0 to 2.0* pts/A
Medium	1.5 to 2.0 pts/A
Fine	2.0 pts/A
* DO NOT exceed 1.6 pts/A on coarse-textured soils in California.	

#### Restrictions and Limitations

- DO NOT apply in no-till in California.
- DO NOT exceed the highest seasonal rate per acre for any given soil type.
- **DO NOT** exceed 2.0 pints per acre (0.95 lb active ingredient per acre) when applied postemergence to cotton for any given soil type.
- Preharvest Interval (PHI) is 60 days between the last application and harvest.
- In treated cotton fields, forage may be fed to or grazed by livestock.
- DO NOT exceed the maximum cumulative seasonal rate of 4.2 pints per acre (2 lbs active ingredient per acre) for combined preplant/preemergence and postemergence applications.

# **EDIBLE BEANS**

Dry (Navy, Great Northern, Red Kidney, Black, Turtle, Cranberry, Small White Type, Guar), Lima, Snap, Chickpeas (Garbanzo Beans), Southern Peas (Cowpeas), and Sweet Lupins

Application Methods: Apply by ground or air.

# **Use Methods, Timings and Use Rates**

Satellite HydroCap herbicide may only be applied

- (fall) preplant surface or preplant incorporated in dry beans, lima beans, snap beans, and Southern peas (cowpeas).
- (fall) preplant surface or preplant incorporated or (spring) preplant surface in chickpeas (garbanzo beans).
- (fall) preplant surface or preplant incorporated or preemergence in sweet lupins.

Fall Applications. For use only in Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington and Wyoming). Apply Satellite HydroCap herbicide preplant surface or preplant incorporated (rainfall, irrigation or mechanically) in late fall prior to planting edible beans (chickpeas [garbanzo beans], dry beans [including navy, great northern, red kidney, black turtle, cranberry, small white type], lima beans, snap beans, Southern peas [cowpeas], and sweet lupins) the following spring. Apply Satellite HydroCap herbicide in the late fall when soil temperatures are 45° F or below but before the ground freezes.

**DO NOT** apply when the air temperature is below 45° F.

Rainfall or irrigation is required for incorporation and activation. Unpredictable weed control can be expected because factors such as length of time between application and planting as well as uncontrollable weather factors will determine herbicide activity and longevity.

#### Use Rates for Fall Applications<sup>1</sup>

Soil Texture	Broadcast Rate <3% Organic Matter	Broadcast Rate >3% Organic Matter
Coarse	2.0 pts/A	2.0 pts/A
Medium	2.5 pts/A	3.0 pts/A
Fine	3.0 pts/A	3.0 pts/A
1 Use limited to certain states. Follow state-specific instructions		

<sup>&</sup>lt;sup>1</sup> Use limited to certain states. Follow state-specific instructions and/or restrictions.

<u>Preplant Incorporated.</u> Apply up to 60 days prior to planting and incorporate. <u>Preemergence.</u> Apply only to sweet lupins at planting or up to 2 days after planting. Apply to a seedbed that is firm and free of clods.

#### **Use Rates for Preplant Incorporated and Preemergence Applications**

		Northern	1 States <sup>1</sup>
Soil Texture	Southern States <sup>1</sup>	<3% Organio	: Matter >3%
Coarse	1.5 pts/A	2.0 pts/A	2.0 pts/A
Medium	2.0 pts/A	2.5 pts/A	3.0 pts/A
Fine	3.0 pts/A	3.0 pts/A	3.0 pts/A
<sup>1</sup> See <b>Restrictions and Limitations</b> for map of specific states.			

#### State-specific Instructions

#### Idaho, Montana, North Dakota, Oregon, and Washington

Apply **Satellite HydroCap herbicide** to chickpeas grown in no-tillage and/or minimum tillage systems in Idaho, Montana, North Dakota, Oregon and Washington. Preplant surface applications must be made within 30 days of planting. **DO NOT** exceed, 1.5, 2.0, and 3.0 pints per acre in coarse, medium and fine textured soils, respectively. When planting, ensure that the seed furrow is fully closed because conditions that allow the seed furrow to inadequately close and/or allow **Satellite HydroCap herbicide** to contact the seed may result in crop injury. Certain unfavorable environmental conditions, including cool temperatures, excessive moisture after application, and wet and/or compacted soil conditions, may result in delayed emergence and stunting with **Satellite HydroCap herbicide** use in chickpeas. Adequate rainfall or irrigation after application prior to weed seedling germination will provide the most effective weed control. Herbicide performance from surface applications may be decreased compared to soil incorporated applications.

#### Idaho, Oregon, Washington

Apply **Satellite HydroCap herbicide** postplant preemergence only to chickpeas grown in conventional tillage systems in Idaho, Oregon, and Washington. Application must be made within 2 days of planting. Do not exceed 1.5 pints per acre. Apply to a firm seedbed free of clods. Soil conditions that cause poor seed furrow closure and coverage may result in delayed emergence and stunting of the crop. Under certain environmental conditions, including cool temperatures, excessive moisture after application and wet soil conditions may result in delayed emergence and stunting with **Satellite HydroCap herbicide** use in chickpeas. Adequate rainfall or irrigation after application prior to weed seedling germination will provide the most effective weed control.

# Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Oregon, Washington, and Wyoming

Apply **Satellite HydroCap herbicide** by ground as a postplant preemergence treatment to dry beans grown under sprinkler irrigation in Colorado,

Idaho, Kansas, Montana, Nebraska, New Mexico, Oregon, Washington, and Wyoming. Dry beans must have a minimum planting depth of 2 inches. Prior to applying **Satellite HydroCap herbicide** to dry beans, check with local seed company or seed supplier for sensitive varieties and to verify the selectivity of Satellite HydroCap herbicide on the specific dry bean variety to be treated. Satellite HydroCap herbicide applications made postplant preemergence to dry beans must be immediately followed by 0.50 to 0.75 inch water from overhead irrigation/rainfall. Satellite HydroCap herbicide application must be made within 1 to 4 days of planting and up to, but not to exceed, 2.0 pints per acre. Apply to a firm seedbed free of clods. Soil conditions that cause poor seed furrow closure and coverage may result in delayed emergence and stunting of the crop. **DO NOT** apply as a chemigation application. **DO NOT** apply **Satellite HydroCap herbicide** in tank mix with Permit® herbicide or Valor® herbicide as a preemergence application to dry beans due to unacceptable crop response. Under certain environmental conditions including cool temperatures, excessive moisture after application and wet soil conditions may result in crop injury, delayed emergence, and/or stunting with Satellite HydroCap herbicide use in dry beans. Adequate rainfall or irrigation after application prior to weed seedling germination will provide the most effective weed control.

#### Restrictions and Limitations

- DO NOT feed lupin hay and forage or graze livestock in treated lupin fields.
- DO NOT apply more than once per cropping season.
- DO NOT apply in any type of irrigation system.

#### **FALLOW**

Application Methods: Apply by ground, air, or chemigation.

# Use Methods. Timings and Use Rates

Apply **Satellite HydroCap herbicide** to fallow ground following crop harvest as a planned residual treatment to control labeled broadleaf and grass weeds as they germinate.

Apply as a broadcast spray at rates up to, but not to exceed, **3.0 pints per acre**. Emerged weeds will not be controlled by this treatment. **Satellite HydroCap herbicide** must be applied with an adequate tank mix partner (i.e. glyphosate) to provide control of emerged weeds.

**DO NOT** make more than one application of during a single fallow period. **DO NOT** apply to fallow ground after July 1 if treated fields are to be planted the following spring to crops not labeled for preplant or preplant incorporated applications of **Satellite HydroCap herbicide**.

There must be at least a 4-month interval between a **Satellite HydroCap herbicide** fallow application and the rotational planting of any fall-seeded cereal crop. Otherwise, specific rotational crop intervals must be adhered to between a fallow application of **Satellite HydroCap herbicide** and the planting of the following crop (see **Crop Rotation Restrictions** in the **Restrictions and Limitations** section of this label).

#### State-specific Instructions

In Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, Oregon, Utah, Washington, and Wyoming, apply as a broadcast spray at rates up to, but not to exceed, 3.2 pints per acre of Satellite HydroCap herbicide.

# **FARMSTEADS**

Apply as a broadcast spray at **2.1 quarts per acre** for short-term (2 to 4 months) or at **4.2 quarts per acre** for long-term (6 to 8 months) preemergence control of labeled broadleaf and grass weeds as they germinate on farmstead nonagricultural areas such as barnyards, lanes, driveways, machinery or implement yards, windbreaks, and nonagricultural fencerows or ditchbanks.

# FRUITING VEGETABLES

Eggplant, Groundcherry (Physalis spp.), Peppers (including banana, bell, chili, cooking, Jalapeno, pimento, sweet), Pepino, Tomatillo, Tomatoes

Application Methods: Apply by ground or air.

#### **Use Methods, Timings and Use Rates**

Uniformly apply by ground or air as a broadcast preplant incorporated application or as a broadcast preplant surface application prior to transplanting fruiting vegetables.

Uniformly apply only by ground as a post-directed application to transplanted or established direct-seeded fruiting vegetables.

**DO NOT** apply prior to direct-seeded fruiting vegetables.

**DO NOT** apply postemergence over the top of or to foliage of fruiting vegetables because severe injury may occur. Apply **Satellite HydroCap herbicide** as a post-directed spray on the soil at the base of the plant, beneath plants, and between rows. Avoid direct contact with foliage or stems. Be sure roots of transplants are established. Following the post-directed spray and when sufficient rainfall or irrigation does not occur to activate the herbicide, mechanically incorporate at the time of blocking and thinning or at layby. Apply **Satellite HydroCap herbicide** prior to weed germination. Emerged weeds will not be controlled by this treatment.

Use **Satellite HydroCap herbicide** in fruiting vegetables transplanted to raised beds. Prior to transplanting, apply **Satellite HydroCap herbicide** preplant non-incorporated in a band to the top of the pressed bed just prior to laying plastic. After transplanting, apply **Satellite HydroCap herbicide** in a band to the previously untreated row middles between the transplanted beds. For either of the banded applications to the bed or row middles, **DO NOT** overlap sprays and exceed the maximum broadcast use rate per acre for the given soil texture.

**Satellite HydroCap herbicide** applied at 2.0 to 3.0 pints per acre may aid in the control or suppression of the following weeds when used as part of a comprehensive weed management program: black nightshade, hairy nightshade.

#### **Use Rates**

Soil Texture	Broadcast Rate
Coarse	1.0 to 1.5 pts/A
Medium	1.5 to 2.0 pts/A
Fine	1.5 to 3.0 pts/A

#### **Restrictions and Limitations**

- **DO NOT** apply more than 3.0 pints per acre per season.
- **DO NOT** apply within 21 days before harvest of tomatoes.
- DO NOT apply within 70 days before harvest of all other fruiting vegetables.
- Avoid root contact with Satellite HydroCap herbicide-treated soil when placing transplants into furrow or hole or injury may occur.
- DO NOT plant lettuce within 6 months after application if the rows were covered with plastic.

# **GARLIC**

Application Methods: Apply by ground, air or chemigation.

#### Use Methods. Timings and Use Rates

**Preemergence.** After planting but before crop and weeds emerge **Postemergence.** 1st to 5th true-leaf growth stage

**Split Application.** At both preemergence and postemergence timings

#### **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Apply between the 2nd and 9th true-leaf stage (2nd to 6th true-leaf stage)

in California). **DO NOT** irrigate in excess of 1/2 inch of water. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

#### **Use Rates**

Soil Texture	Broadcast Rate
Coarse	1.5 pts/A
Medium	2.0 pts/A
Fine	3.0 pts/A

#### **Restrictions and Limitations**

- DO NOT exceed 3.0 pints per acre per crop.
- DO NOT apply within 60 days before harvest in California and within 45 days of harvest in all other states.
- DO NOT feed or graze these crops.

#### **GRAIN SORGHUM**

Application Methods: Apply by ground or air.

### **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** as a postemergence incorporated (CULTI-SPRAY) application in grain sorghum grown in all states.

Apply **Satellite HydroCap herbicide** early postemergence in grain sorghum grown in states east of the Mississippi River and in Arizona, Arkansas, eastern Texas. Louisiana, and the Missouri bootheel.

Additional Weeds Controlled. In addition to the weeds listed in TABLE 2, Satellite HydroCap herbicide as a CULTI-SPRAY application will control the following weeds in grain sorghum: wild proso millet and shattercane.

<u>CULTI-SPRAY.</u> Apply from the 4-inch growth stage to as late as the last cultivation (layby) of grain sorghum. See specific directions for (CULTI-SPRAY) application under **Application Instructions**.

**Early Postemergence.** For use only in states east of the Mississippi River plus Arizona, Arkansas, eastern Texas, Louisiana, and the Missouri bootheel.

Prepare the seedbed so it is firm and free of clods and trash. Use only where adequate tillage is practiced to provide good seed coverage. Plant grain sorghum at least 1-1/2 inches deep to ensure good seed coverage.

#### **Use Rates**

# **CULTI-SPRAY Application**

Soil Texture	Southern States <sup>1</sup>	Northern States <sup>1</sup>
Coarse	1.5 pts/A	2.0 pts/A
Medium	2.0 pts/A	3.0 pts/A
Fine	3.0 pts/A	3.0 pts/A
<sup>1</sup> See <b>Restrictions and Limitations</b> for map of specific states.		

# **Early Postemergence Application**

Soil Texture	Satellite HydroCap herbicide
Coarse	DO NOT USE
Medium, Fine	2.0 pts/A

#### **Restrictions and Limitations**

- DO NOT apply in grain sorghum preplant incorporated or preemergence because serious crop injury can result.
- DO NOT apply in grain sorghum more than once per crop season.
- DO NOT apply as a CULTI-SPRAY treatment in grain sorghum planted in double-row beds.
- DO NOT replant grain sorghum if crop loss occurs.
- DO NOT apply in liquid fertilizer.

 Livestock can graze or be fed forage from Satellite HydroCap herbicidetreated grain sorghum fields after 21 days following application.

#### **GREEN ONIONS**

Chives [fresh leaves], Leeks, Spring Onions, Scallions, Japanese Bunching Onions, Green Shallots, and Green Eschalots

**Application Methods:** Apply postemergence by ground, air, or chemigation.

# **Use Methods, Timings and Use Rates**

Uniformly apply **2.0 pints per acre** as a broadcast spray to the soil surface as preemergence spray or as a postemergence spray to the crop at the 2 to 3 true-leaf stage at least 30 days before harvest. If **Satellite HydroCap herbicide** is to be applied sequentially as both a preemergence and postemergence spray, the preemergence spray must be applied 30 days prior to the postemergence spray. Onion seed must be fully covered by soil at planting. Injury may occur if onion seed is exposed to **Satellite HydroCap herbicide**.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Apply at 2 to 3 true-leaf stage at least 30 days before harvest. **DO NOT** irrigate in excess of 0.5 inch of water. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

#### Restrictions and Limitations

- Only apply preemergence to green onions grown on muck soils or on mineral soils with greater than 3% organic matter.
- **DO NOT** apply more than 2.0 pints per acre per application.
- **DO NOT** apply more than 4.0 pints per acre per season.
- DO NOT apply within 30 days before harvest.
- **DO NOT** feed forage or graze livestock in treated fields.

#### HOPS

For use in Idaho, Oregon, and Washington only.

Application Method: Apply by ground only.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** before target weeds germinate, when hops are in the dormant or vegetative stages of growth. Make application as a broadcast or banded treatment (including postemergence-directed) using ground equipment, applying directly to the ground beneath the vines and/or in areas between rows. Apply uniformly at a broadcast rate of 1.1 to 4.2 quarts (1 to 4 lbs ai)/A in either a single application or sequential applications with at least 30 days between applications. **Satellite HydroCap herbicide** may be applied with other herbicides registered on hops for control of emerged weeds as a sequential use program or as a tank mix. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

• Preharvest Interval (PHI) for hop cones is 90 days.

#### **Restrictions and Limitations**

- **DO NOT** apply to hops by air or through any type of irrigation system.
- DO NOT apply over the top of vines with leaves or cones. Spray contacting hop foliage or cones may cause injury.
- **DO NOT** apply more than 4.2 quarts of **Satellite HydroCap herbicide** per acre per year to hops from any combination of applications.

# **LEAFY BRASSICA GREENS**

Mustard greens, Broccoli raab, Chinese cabbage (bok choy), Collards, Kale, Mizuna, Mustard spinach, Rape greens, Turnip greens (cultivars of varieties grown for leaves only)

Application Methods: Apply by ground or air.

# **Use Methods, Timings and Use Rates**

With a single application, uniformly apply up to **2.1 pints per acre** as a broadcast foliar spray to either direct-seeded or transplanted leafy Brassica greens at the 4-leaf to 5-leaf stage.

#### **Restrictions and Limitations**

- DO NOT apply preplant, pretransplant, or preemergence (direct-seeded) to leafy Brassica greens because severe injury may occur.
- DO NOT foliar apply to leafy Brassica greens before the 4-leaf growth stage because severe injury may occur.
- DO NOT apply to turnip greens varieties grown for roots or to dualpurpose varieties grown for roots and tops.
- **DO NOT** use treated turnip greens roots for any feed or food purpose.
- DO NOT apply more than 2.1 pints per acre per season.
- DO NOT apply within 21 days before leafy greens are harvested.

#### **LENTILS AND PEAS**

English, Dry, Garden, Dwarf, Green, Pigeon, and Edible Pod

Application Methods: Apply by ground or air.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** preplant surface or preplant incorporated for weed control in lentils and peas.

Preplant Surface and Preplant Incorporated (fall applications in Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington, and Wyoming)

Apply **Satellite HydroCap herbicide** and incorporate (rainfall, irrigation or mechanically) in late fall prior to planting lentils or peas the following spring. Apply in the late fall when soil temperatures are 45° F or below but before the ground freezes.

**DO NOT** apply when the air temperature is below 45° F.

Rainfall or irrigation is required for incorporation and activation. Unpredictable weed control can be expected because factors such as length of time between application and planting as well as uncontrollable weather factors will determine herbicide activity and longevity.

<u>Preplant Incorporated.</u> Apply **Satellite HydroCap herbicide** 60 days prior to planting up to immediately before planting. After application, rotary hoeing and shallow cultivation/tillage can be practiced without reducing weed control. Avoid tillage that will bring untreated soil to the surface.

#### **Use Rates**

#### Preplant Surface and Preplant Incorporated Application<sup>1</sup>

Soil Texture	Broadcast Rate
Coarse	1.5 pts/A
Medium	2.0 pts/A
Fine	3.0 pts/A
<sup>1</sup> Follow seasonal restrictions and/or state-specific instructions.	

# State-specific Instructions

#### Idaho, Montana, North Dakota, Oregon, and Washington

Apply **Satellite HydroCap herbicide** to lentils or peas (dry peas only) grown in no-tillage and/or minimum tillage systems in Idaho, Montana, North Dakota, Oregon and Washington. Preplant surface applications must be made within 30 days of planting. When planting, ensure that the seed furrow is fully closed because conditions that allow the seed furrow to inadequately close and/or allow **Satellite HydroCap herbicide** to contact the seed may result in crop injury. Certain unfavorable environmental conditions, including cool temperatures, excessive moisture after application, and wet and/or compacted soil conditions, may result in delayed emergence and stunting with **Satellite HydroCap herbicide** use in lentils or peas. Adequate rainfall or irrigation after application prior to weed seedling germination will provide the most effective weed control. Herbicide performance from surface applications may be decreased compared to soil incorporated applications.

#### Idaho, Oregon, Washington

Apply **Satellite HydroCap herbicide** postplant preemergence only to lentils or all peas grown in conventional tillage systems in **Idaho**, **Oregon** and **Washington**. Application must be made within 2 days of planting. Apply up to but not to exceed 1.5 pints per acre. Apply to a firm seedbed free of clods. Soil conditions that cause poor seed furrow closure and coverage may result in delayed emergence and stunting of the crop. Under certain environmental conditions including cool temperatures, excessive moisture after application and wet soil conditions may result in delayed emergence and stunting with **Satellite HydroCap herbicide** use in peas or lentils. Adequate rainfall or irrigation after application prior to weed seedling germination will provide the most effective weed control.

#### **Restrictions and Limitations**

- DO NOT use in California.
- DO NOT apply preemergence in peas unless otherwise noted in statespecific instructions.
- **DO NOT** apply more than once per cropping season.
- DO NOT apply to peas, lentils, pea or lentil forage, pea silage, pea hay, or pea straw grown for livestock feed.
- **DO NOT** apply in any type of irrigation system.
- Any crop registered for a preplant incorporated application of Satellite HydroCap herbicide can be double cropped after peas.

#### MELONS

Cantaloupe, Citron melon, Muskmelon, Watermelon

Application Methods: Apply only by ground.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** sequentially in melon production. Make the initial application of up to **2.1 pints per acre** as a shielded application to row middles (either before melon transplanting or before a seeded crop has emerged) or between rows covered with plastic mulch (prior to holes being punched in plastic for melon planting). Make a second shielded application at up to **2.1 pints per acre** to row middles or between plastic mulch prior to melon vine running. The interval between the sequential applications must be at least 21 days. Avoid spray contact with melon foliage or running vines because crop injury could occur.

#### **Restrictions and Limitations**

- **DO NOT** apply more than 2.1 pints per acre in a single application or more than 4.2 pints per acre per season.
- DO NOT apply within 35 days before melon harvest.
- DO NOT feed forage or graze livestock in treated fields.
- Not for use in California except as directed in supplemental labeling.

# MINT Peppermint and Spearmint

Application Methods: Apply by ground or air.

# **Use Methods, Timings and Use Rates**

Make a single broadcast preemergence application of **Satellite HydroCap herbicide** to dormant established mint before weed germination at 1.5 pints to 4.0 pints per acre, depending on soil texture (see following chart). After a **Satellite HydroCap herbicide** application, some temporary crop injury may be observed early in the growing season as mint breaks dormancy and begins to grow.

Satellite HydroCap herbicide will not cause crop injury when applied according to the label under normal growing conditions. Non-uniform application may result in injury to crops, poor stands, or soil residues; conversely, uneven application may reduce weed control. Diseases, cold weather, excessive moisture, deep planting, low or high pH, salinity, or drought may weaken seedlings and plants and make them more susceptible to herbicidal damage.

#### **Use Rates**

Soil Texture	Broadcast Rate
Coarse	1.5 to 2.0 pts/A
Medium	2.0 to 4.0 pts/A
Fine	2.0 to 4.0 pts/A

#### Restrictions and Limitations

- **DO NOT** apply to baby mint in the first year of growth and establishment.
- **DO NOT** apply to mint that has broken dormancy or crop injury may result. Application to mint that is near dormancy break can result in crop injury. Risk of crop injury increases the closer application is to mint dormancy break.
- DO NOT apply to mint stands that have been weakened by age, disease, cold weather, excessive moisture, or other factors that reduce crop vigor. Mint growing under stress is more susceptible to herbicidal damage.
- **DO NOT** apply more than 4.0 pints per acre per season.
- DO NOT apply within 90 days before harvest.
- DO NOT allow livestock to graze on treated spent hay or feed treated spent hay to livestock.
- DO NOT apply this product on mint through any type of irrigation system.

#### ONIONS

#### Direct-seeded and Transplanted Dry Bulb and Shallots (Dry Bulb)

Application Methods: Apply by ground, air or chemigation.

# **Use Methods, Timings and Use Rates**

#### **Mineral Soil Use Rate**

Soil Texture	Broadcast Rate
Coarse	1.5 pts/A
Medium	2.0 pts/A
Fine	3.0 pts/A

#### **Restrictions and Limitations (Mineral Soils)**

- **DO NOT** mechanically incorporate except as specified for use on dry bulb onions in Colorado and the Texas High Plains.
- **DO NOT** exceed 3.2 pints per acre per crop (except Idaho, Oregon, and Washington).

- DO NOT apply within 60 days before harvest in California and within 45 days before harvest in all other states.
- DO NOT feed or graze these crops.
- DO NOT apply preemergence through the loop stage if heavy rains are
  expected or severe crop injury may result. If irrigating immediately after
  Satellite HydroCap herbicide application at the preemergence through
  loop stage, DO NOT irrigate in excess of 1/2 inch of water.

# **Muck Soils**

Satellite HydroCap herbicide may be applied sequentially on muck soils.

#### **Muck Soil Use Rates**

Application Timing and Growth Stage	Rate
Preemergence through Loop Stage	4.0 pts/A
Early Postemergence (2nd to 6th true-leaf stage)	4.0 pts/A
Late Postemergence (6th to 9th true-leaf stage)	4.0 pts/A

# Restrictions and Limitations (Muck Soils)

- DO NOT apply to muck soils in California.
- DO NOT apply within 45 days before harvest.
- DO NOT feed or graze these crops.
- DO NOT apply more than 12.5 pints per acre per growing season on muck soils. To maximize crop safety, ensure good soil coverage during planting or transplanting and delay preemergence applications to the loop stage, if possible.
- DO NOT apply preemergence through the loop stage if heavy rains are
  expected or severe crop injury may result. If irrigating immediately after
  Satellite HydroCap herbicide application at the preemergence through
  loop stage, DO NOT irrigate in excess of 1/2 inch of water.
- DO NOT plant sugar beets, red beets, spinach, winter wheat, or winter barley as rotational crops on muck soils for 12 months from the time of last application if more than 3.2 pints per acre of Satellite HydroCap herbicide is applied to the onion crop.
- If loss of onion crop occurs, **DO NOT** replant any crop other than onions in muck soil during the same cropping year and **DO NOT** work the soil deeper than 2 inches.

#### **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Apply between the 2nd and 9th true-leaf stage (2nd to 6th true-leaf stage **in California**) unless otherwise specified below. **DO NOT** irrigate in excess of 1/2 inch of water. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

# State-specific Instructions

#### In All States Except California

Apply as a broadcast treatment when dry bulb onions or dry bulb shallots have 2 to 9 true leaves.

### Additional Use in Colorado, Kansas, and Nebraska

Apply **Satellite HydroCap herbicide** sequentially in seeded dry bulb onions. Apply first application at loop stage. Apply sequential application early postemergence (2nd to 9th true-leaf stage). **DO NOT** exceed the maximum labeled rate for a given soil texture. **DO NOT** apply **Satellite HydroCap herbicide** at loop stage through the 9th true-leaf stage if heavy rains are expected, or severe crop injury may result.

# Additional Use in Colorado and the High Plains of Texas

For transplanted dry bulb onions only, apply and shallow incorporate (less than 2 inches deep) **Satellite HydroCap herbicide** into preformed beds prior to transplanting.

#### Additional Use in Michigan

For mineral soils containing >10% organic matter, follow the directions for muck soils (see following).

#### Additional Use in Idaho, Oregon, and Washington

Apply as a broadcast treatment when dry bulb onions or dry bulb shallots are between the flag leaf to 9th true-leaf stage. Use **Satellite HydroCap herbicide** at 3.0 to 4.0 pints per acre for dodder control on medium-textured and fine-textured soils. **DO NOT** apply using chemigation at the dodder control rate.

Apply **Satellite HydroCap herbicide** in the fall or spring to the furrow area of land bedded in the fall in preparation for planting seed of dry bulb onions the following spring. Apply as a banded application at rates based on appropriate soil texture. Band width is 1/2 the width of the row spacing. Keep **Satellite HydroCap herbicide** away from the area where dry bulb onion seed will be planted.

Harrow off tops of beds following **Satellite HydroCap herbicide** furrow applications prior to planting dry bulb onions.

For selective weed control in the onion row, apply as a banded postemergence application to flag-leaf dry bulb onions at the labeled rates based on soil texture. Apply **Satellite HydroCap herbicide** only once to the furrow area and once to the dry bulb onion row as a postemergence application.

# Additional Use in Oregon and Washington – Dry Bulb Onions – Preemergence Weed Control

Apply Satellite HydroCap herbicide to control annual grass and small seeded broadleaf weeds to uniformly planted (1-inch deep; furrow must be thoroughly covered with soil) dry bulb onions. Failure to plant dry bulb onions a minimum of 1 inch deep in the soil increases the potential for **injury.** Apply in a single application after germination of the onion seed but prior to emergence (delayed preemergence) when 75% of the radicles have developed on the onion seedlings. Determine the radicle emergence by digging onion seedlings at random locations in the field and note radicle elongation. Apply **Satellite HydroCap herbicide** in 10 or more gallons of water per acre using ground equipment at the rates specified in the table below. Adequate incorporation by rainfall or irrigation will ensure effective control of weeds. Do not apply more than 0.25 inch of initial overhead irritation following delayed preemergence application of Satellite HydroCap herbicide on dry bulb onions. Satellite HydroCap herbicide must be applied to clean-tilled soil for effective weed control. A tank mix with a burndown herbicide controls emerged weeds prior to onion emergence.

The risk of crop injury is greater on coarse-textured soils (>90% sand) than with medium- or fine-texture soils. Potential injury may occur due to variability within soil type. Using higher rates of **Satellite HydroCap herbicide** within soil types may increase the risk of crop injury. If adverse weather results in loss of onions, any crop registered for **Satellite HydroCap herbicide** preplant incorporated use can be replanted the same year into **Satellite HydroCap herbicide**-treated soil with no adverse effects. Rework the soil deeper than 2 inches if replanting is necessary.

**Satellite HydroCap herbicide** may be applied sequentially in dry bulb seeded onions. Make the first application using delayed preemergence directions. Make sequential applications of **Satellite HydroCap herbicide** early postemergence (up to 9th true-leaf stage).

#### Restrictions for this use:

- DO NOT exceed 3.0 pints per acre per crop.
- DO NOT exceed the maximum labeled rate for a given soil texture.
- **DO NOT** apply through any type of irrigation system or by air.
- DO NOT apply preplant incorporated or preplant.
- DO NOT apply within 45 days of harvest.
- DO NOT feed treated dry bulb onions to livestock or allow livestock to graze in treated areas.

#### **Use Rates**

Soil Texture	Delayed Preemergence Broadcast Rate (OR and WA only)
Coarse	1.0 to 2.0 pts/A
Medium	1.5 to 2.5 pts/A
Fine	1.5 to 3.0 pts/A

#### In California

Only apply **Satellite HydroCap herbicide** as a single application when dry bulb onions or dry bulb shallots have 2 to 6 true leaves.

# Additional Use in California – Dry Bulb Onions – Preemergence in Direct-Seeded Onions at the Loop Stage

Apply **Satellite HydroCap herbicide** to control annual grass and small seeded broadleaf weeds at 1.0-1.5 pints per acre after onion seedlings have emerged and are at the loop stage of growth. Select the use rate according to the soil texture as shown in the table below. Apply **Satellite HydroCap herbicide** in 10 or more gallons of water per acre using ground equipment. Adequate incorporation by rainfall or irrigation will ensure effective control of weeds. Do not apply more than 0.25 inch of initial overhead irritation following application of **Satellite HydroCap herbicide** in direct seeded onions at the loop stage. **Satellite HydroCap herbicide** must be applied to clean-tilled soil for effective weed control.

#### **Use Rates**

Soil Texture	Preemergence in Direct-Seeded Onions At the Loop Stage (CA only)
Coarse	1.0 to 1.5 pts/A
Medium	1.0 to 1.5 pts/A
Fine	1.5 pts/A

The risk of crop injury is greater on coarse-textured soils (>90% sand) than with medium- or fine-texture soils. Potential injury may occur due to variability within soil type. Using higher rates of **Satellite HydroCap herbicide** within soil types may increase the risk of crop injury. If adverse weather results in loss of onions, any crop registered for **Satellite HydroCap herbicide** preplant incorporated use can be replanted the same year into **Satellite HydroCap herbicide**-treated soil with no adverse effects. Rework the soil deeper than 2 inches if replanting is necessary. **Satellite HydroCap herbicide** may be applied sequentially in dry bulb seeded onions. Make the first application after seedling emergence at the loop stage of growth. Make sequential applications of **Satellite HydroCap herbicide** early postemergence (up to 6th true-leaf stage).

#### **Restrictions for California Dry Bulb Onions:**

- **DO NOT** exceed 3.2 pints per acre in onions per crop per year.
- **DO NOT** exceed the maximum labeled rate for a given soil texture.
- **DO NOT** apply preemergence in direct seeded onions at the loop stage through any type of irrigation system or by air.
- DO NOT apply preplant incorporated or preplant.
- DO NOT apply to muck soils.
- DO NOT apply to green (bunching) onions or leeks.
- DO NOT apply within 60 days of harvest.
- DO NOT feed treated dry bulb onions to livestock or allow livestock to graze in treated areas.

#### **PEANUTS**

Application Methods: Apply by ground, air, or chemigation.

# Use Methods, Timings and Use Rates

Apply  ${\bf Satellite\ HydroCap\ herbicide}$  preplant incorporated in peanuts and applied preemergent to peanuts grown under overhead irrigation.

**DO NOT** use in California.

**Preplant Incorporated.** Apply up to 60 days prior to planting and incorporate. **Preemergence.** Apply at planting or up to 2 days after planting and before crop emergence. To prevent decreased crop pegging, adequate incorporation must be achieved by applying a minimum of 0.75 inch of overhead irrigation or rainfall within 48 hours of application.

#### **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

#### **Use Rates**

Region	Rate
New Mexico, Oklahoma, and Texas	1.0 to 2.0 pts/A
Other peanut growing states*	2.0 pts/A

<sup>\*</sup> For heavy weed infestations, especially of Texas panicum, up to 3.2 pts/A of **Satellite HydroCap herbicide** can be used in Alabama, Florida or Georgia.

#### PERENNIAL GRASSES GROWN FOR SEED

Application Methods: Apply by ground, air or chemigation.

# Use Methods, Timings and Use Rates

Apply prior to target weed germination. Uniformly apply at a broadcast rate of **2.1 to 4.2 quarts per acre** in a single application. As an option, apply **Satellite HydroCap herbicide** in two split applications, with 1/2 the seasonal application rate applied in the fall or winter followed by the other 1/2 the seasonal application rate applied in the spring. **DO NOT** exceed a cumulative total of 4.2 quarts per acre in any one crop season.

In both warm-season and cool-season perennial grasses, use the higher application rate where more dense infestations of targeted annual grasses, annual broadleaf, or volunteer grass seedlings are anticipated, or when a longer duration of residual weed control is desired. Excess grass straw and crop residue from the previous harvest must be evenly spread or removed by such methods as crew cutting, propane flaming, or open field burning (when local regulations allow) prior to **Satellite HydroCap herbicide** application, or reduced weed control may result.

Apply **Satellite HydroCap herbicide** in a sequential use program or as a tank mix with other registered herbicides that control emerged weeds.

Satellite HydroCap herbicide may cause temporary injury to perennial grass stands. Applications made in periods of cold temperatures that temporarily limit normal crop growth or in extended cold temperature periods that initiate winter dormancy in grass crops may result in crop injury. Diseases, extremely cold weather, drought, extensive frost heaving, low or high pH, or salinity may weaken stands and make them more susceptible to herbicidal damage.

Additional Weeds Controlled. Satellite HydroCap herbicide applied prior to weed germination will control annual bluegrass, volunteer fescue, and volunteer ryegrass in addition to the weeds listed in TABLE 2. Weeds Controlled

Apply **Satellite HydroCap herbicide** in the following perennial grasses grown for seed production:

#### Warm-season perennial grasses

Apply to established (defined as planted in the fall or spring which has gone through a first cutting/mowing) warm-season perennial grasses, such as Bermudagrass, switchgrass, and others. Apply to postharvest grass during the fall or during winter dormancy or after the first seed harvest/cutting. **DO NOT** apply to warm-season perennial grasses after greenup in the spring prior to the first seed harvest/cutting.

#### Cool-season perennial grasses

Apply to established (6 or more tillers per plant) cool-season perennial grasses, such as Kentucky bluegrass, tall fescue, orchardgrass, perennial ryegrass, fine fescue, and others. Apply to postharvest grass during regrowth at the beginning of significant fall rains or in spring prior to germination of targeted weeds.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems following all directions, special instructions, and precautions about chemication in **Spraying Instructions** section of this label.

#### **Tank Mixes**

Satellite HydroCap herbicide may be tank mixed with Outlook® herbicide or with other herbicides labeled for use in perennial grasses grown for seed. It is recommended to test tank mixes on a small portion of the target crop to determine if damage is likely to occur.

Physical incompatibility, reduced weed control, or crop injury may result from mixing Satellite HydroCap herbicide with other pesticides, additives, or fertilizers.

Applications of postemergence herbicides may cause crop injury. Always perform a mixing test to check the compatibility of **Satellite HydroCap herbicide** with all potential tank mix partners. Follow all precautions and restrictions on the labels of all products applied in combination with **Satellite HydroCap herbicide**. Always follow the most restrictive label.

# **Precautions**

- Some stunting and chlorosis of the perennial grasses may occur with postemergence applications.
- Applications made after the perennial grasses exceed 6 inches in height may result in poor weed control due to possible reduced spray coverage to the soil.
- The grass straw remaining after seed harvest of both warm-season and cool-season perennial grasses may be used as livestock bedding, and/or grazed by or fed to livestock. The grower must notify the seed processor that there is no pesticide tolerance on grass seed screenings; therefore, it cannot be used in livestock feed.

#### **Restrictions and Limitations**

- DO NOT apply if surface water is present in the field.
- DO NOT exceed a cumulative total of 4.2 quarts per acre in any one crop season.
- DO NOT harvest forage from treated fields of both warm-season and coolseason perennial grasses until 45 days after application.
- **DO NOT** harvest hay from treated fields of both warm-season and coolseason perennial grasses until **60 days** after application.
- From treated fields of both warm-season and cool-season perennial grasses, **DO NOT** harvest seed within 90 days after application.

#### **POTATOES**

Application Methods: Apply by ground, air, or chemigation.

#### **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** preemergence, preemergence incorporated, or early postemergence in potatoes.

Additional Weeds Controlled. In addition to the weeds listed in TABLE 2, Satellite HydroCap herbicide will control stinging nettle in potatoes.

**Preemergence.** Apply after planting, but before potatoes and weeds emerge, or after dragoff.

<u>Preemergence Incorporated.</u> Apply and incorporate after planting but before potatoes and weeds emerge. Where dragoff is practiced, apply and incorporate before, at, or after dragoff, but before potatoes and weeds emerge. Care must be taken so that incorporation equipment does not damage seed pieces or elongating sprouts.

**Early Postemergence.** Apply from crop emergence to the 6-inch stage of growth. **DO NOT** apply postemergence if potatoes are under stress from cold/wet or hot/dry conditions or crop injury may occur.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Apply preemergence after planting, after dragoff, or early postemergence through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in the **Spraying Instructions** section of this label.

#### **Use Rates**

Soil Texture	<3% Organic Matter >3%		
Coarse	1.5 pts/A	1.5 pts/A	
Medium	2.0 pts/A	3.0 pts/A	
Fine	3.0 pts/A	3.0 pts/A	

#### **Restrictions and Limitations**

- DO NOT apply to sweet potatoes or yams.
- DO NOT apply preplant.
- DO NOT make more than one application per season.
- Application of on White Rose variety potatoes during or followed by cool and/or wet weather conditions may result in crop injury.

#### RICE

Application Methods: Apply by ground or air.

#### Use Methods, Timings and Use Rates

Apply **Satellite HydroCap herbicide** as a delayed preemergence application in drilled dry-seeded rice or as an early postemergence application in dry-seeded rice. Treatments include conventional, reduced or minimum tillage, and no-till (stale seedbed) rice. Prepare the seedbed to be firm and free of clods and to allow for good seed coverage. The use of a planter under conditions that **DO NOT** allow good soil coverage of the rice seed can result in reduced stand or stunting if **Satellite HydroCap herbicide** contacts germinating rice seed. Use **Satellite HydroCap herbicide** applied postemergence in California water-seeded rice as a component of a comprehensive weed management program.

Additional Weeds Controlled. In addition to the weeds listed in TABLE 2, Satellite HydroCap herbicide will control the following weeds in rice: junglerice and sprangletop.

<u>Delayed Preemergence.</u> Apply alone or with tank mix partner for delayed preemergence weed control in grain-drilled, dry-seeded rice. Apply alone or in tank mixture to levees after the levees are pulled and planted. Exposed seeds that come in contact with **Satellite HydroCap herbicide** may be injured. Apply only when growing conditions favor vigorous rice growth. Ensure that the seedbed has adequate moisture for seed germination. **Not for use in grain-drilled, dry-seeded rice in California.** 

Uniformly apply the specified rate of **Satellite HydroCap herbicide** after rice planting and before rice emergence (spiking) and weed germination. Apply after the rice seed has absorbed water and germinated and after the soil has been previously sealed over the seed by at least 1 inch of 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 there is insufficient moisture, flushing is recommended before **Satellite HydroCap herbicide** application to supply moisture for root (radicle) initiation and for vigorous rice and weed growth.

If applied to soil prior to these conditions, or to cracked soil, stand reduction or stunting of rice may occur. Under some conditions, use of gibberellic acid-treated seed, heavy rainfall after application, or flushing after application may result in herbicide injury to rice. Rice can overcome moderate injury with appropriate cultural practices.

Because of the residual activity of **Satellite HydroCap herbicide**, 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 **Satellite HydroCap herbicide**.

Early Postemergence. Apply as a tank mix partner. Base applications on weed and crop size guidelines of the tank mix partner. DO NOT apply to fields with standing water. If necessary, fields may be flushed prior to treatment to produce vigorous rice and weed growth. Because soil and weeds must be completely exposed to spray coverage, flood water must not be on the field at the time of application. 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. Because of residual activity of Satellite HydroCap herbicide, 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 Satellite HydroCap herbicide.

<u>Postemergence</u> (California water-seeded rice only). Apply alone or tank mixed with a postemergence herbicide after water-seeded rice has reached the 4-leaf to 6-leaf stage (spike plus 3 to 5 true leaves). Applications made prior to the 4-leaf rice stage may result in crop injury.

Water-seeded rice must also be well-rooted/pegged (i.e. standing erect after the flood is removed) prior to application. **DO NOT** apply to rice that is leaning over and/or laying flat to the ground following flood removal since this is characteristic of a poorly established root system. Rice roots must be below the **Satellite HydroCap herbicide**-treated soil zone. Injury, stunting, and/or stand reduction can occur if **Satellite HydroCap herbicide** contacts the rice roots.

Fields must be completely drained and free of standing water (moist/saturated soil) prior to application. If the soil is saturated at the time of application, allow the soil surface to dry prior to restoring the permanent flood. **Satellite HydroCap herbicide** requires alternate wetting/drying cycles to be activated. Weed control will be reduced if the soil surface is not allowed to dry out prior to restoration of the permanent flood. Resume normal water management practices following permanent flood restoration.

**Satellite HydroCap herbicide** does not control weeds postemergence; therefore, **Satellite HydroCap herbicide** must be tank mixed with a postemergence herbicide to control emerged weeds at the time of application.

**Satellite HydroCap herbicide** will aid in the control or suppression of the following weeds when used as part of a comprehensive weed management program:

Barnyardgrass, early and late watergrass (including bio-types resistant to other herbicide modes of action, e.g. rice mimic), sprangletop, smallflower umbrella sedge\*, redstem\* (\* Suppression only)

In California water-seeded rice, make applications of **Satellite HydroCap herbicide** with either aerial or ground application equipment. For aerial application, apply the specified rate in 5 gallons to 10 gallons of water per acre. If applied as a tank mixture with another herbicide, make sure proper gallonage per acre per label directions (i.e. 10 to 15 with propanil) is used to ensure adequate coverage. To minimize drift, **DO NOT** apply during periods of wind greater than 10 mph, or when wind conditions favor drifting, or if there is a temperature inversion. It is recommended that a

flagman or an automatic mechanical flagging unit on the aircraft be used to avoid overlapping and possible crop injury.

For ground equipment, apply the specified rate in 10 gallons to 20 gallons of water per acre. If **Satellite HydroCap herbicide** is applied as a tank mixture with another herbicide, make sure proper gallonage per acre per label directions (i.e. 20 to 30 for propanil) is used to ensure adequate coverage. Use a properly calibrated low-pressure (20 psi to 40 psi) sprayer equipped with appropriate 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. **D0 NOT** apply **Satellite HydroCap herbicide** during periods of gusty winds or when wind velocity is greater than 20 mph.

<u>Postemergence Tank Mixtures:</u> To control emerged weeds at application, apply **Satellite HydroCap herbicide** as a tank mix with one of the following postemergence herbicides:

Clincher® herbicide Grandstand® herbicide Granite® SC herbicide Stam® herbicide SuperWham! herbicide Regiment® herbicide Strada® WG herbicide Whip® 360 herbicide

When using tank mixtures with **Satellite HydroCap herbicide**, always read the companion product label(s) and follow all precautions and restrictions. Always follow the most restrictive label.

Observe all restrictions regarding propanil-restricted zones.

#### **Use Rates**

#### **Delayed Preemergence Applications**

Soil Texture	Rate
Sands, loamy sands	DO NOT USE
Sandy loams	1.5 pts/A
Loams, silt loams, silts, sandy clay loams	2.0 pts/A
Silty clay loams, clay loams, sandy clays, silty clays, clays	2.0 pts/A

#### **Early Postemergence Application**

Soil Texture	Rate
Coarse	1.5 pts/A
Medium	2.0 pts/A
Fine	2.0 pts/A

#### Postemergence in California Water-seeded Rice

Soil Texture	Rate
Coarse	1.5 pts/A
Medium	2.0 pts/A
Fine	2.0 pts/A

# Restrictions and Limitations (for water-seeded rice)

- **DO NOT** apply prior to the 4-leaf rice stage (spike plus 3 true leaves) or to rice that is not well-rooted/pegged. The rice must be standing erect after the flood is removed and prior to application.
- DO NOT apply to fields with standing water.
- DO NOT apply through any type of irrigation system.
- DO NOT apply in liquid fertilizer.
- DO NOT spray target crop within 60 feet of sensitive crops (crops not listed on the Satellite HydroCap herbicide label).

- **DO NOT** spray target crop within 60 feet of crops labeled for **Satellite HydroCap herbicide** applications where the method of application, rate, or timing of spray application is prohibited.
- **DO NOT** exceed the maximum rate for any soil type in one season.
- **DO NOT** use water containing **Satellite HydroCap herbicide** residues from rice cultivation to irrigate food or feed crops that are not registered for use with **Satellite HydroCap herbicide**.

In case of a crop failure due to weather conditions or disease following treatment with **Satellite HydroCap herbicide** alone or in a tank mixture, only drilled dry-seeded rice may be immediately replanted; however, the grower assumes all risks and consequences associated with replanting of rice because there is the potential for stand reduction or stunting. UPI recommends a 10% increase in seeding rate. Replant seed below the herbicide layer because reduced stand or stunting may occur if **Satellite HydroCap herbicide** contacts germinating rice seed. **DO NOT** replant gibberellic acid-treated seed. **DO NOT** reapply **Satellite HydroCap herbicide** alone or in a tank mixture.

**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.

#### **Restrictions and Limitations**

- **DO NOT** apply through any type of irrigation system.
- DO NOT apply in liquid fertilizer.
- DO NOT apply to rice fields if fields are used for fish production, especially catfish farming.
- Satellite HydroCap herbicide may be applied to rice fields used for crayfish production.
- **DO NOT** use water containing **Satellite HydroCap herbicide** residues from rice cultivation to irrigate food or feed crops that are not registered for use with **Satellite HydroCap herbicide**.
- In case of a crop failure due to weather conditions or disease following treatment with **Satellite HydroCap herbicide** alone or in a tank mixture, only drilled dry-seeded rice may be immediately replanted; however, the grower assumes all risks and consequences associated with replanting of rice because there is the potential for stand reduction or stunting. UPI recommends a 10% increase in seeding rate. Replant seed below the herbicide layer because reduced stand or stunting may occur if **Satellite HydroCap herbicide** contacts germinating rice seed. **DO NOT** replant with gibberellic acid-treated seed. **DO NOT** reapply **Satellite HydroCap herbicide** alone or in a tank mixture.
- DO NOT apply 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.

### **SOYBEANS**

Application Methods: Apply by ground or air.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** in conventional, minimum, or no-till as a fall surface, fall incorporated, preplant surface, preplant incorporated, or preemergence application in soybeans.

Additional Weeds Controlled. In addition to the weeds listed in TABLE 2, Satellite HydroCap herbicide will control or reduce competition from the following weeds in soybeans: itchgrass and red rice. For specific rates for red rice and itchgrass management, see table at end of this section.

<u>Fall Applied.</u> Satellite HydroCap herbicide may be surface applied or incorporated in the fall, after fall harvest and prior to ground freeze in states north of I-80 and the entire states of Illinois, Indiana, Iowa, Kansas, Kentucky, Missouri, Nebraska, Ohio, Oklahoma, and Texas. Fall applications will not provide season-long weed control.

<u>Preplant Surface.</u> Apply up to 15 days prior to planting. **Satellite HydroCap herbicide** may be applied up to 45 days prior to planting when used in a tank mix or applied sequentially with **Canopy herbicide** and **Tricor herbicide**. Apply **Satellite HydroCap herbicide** tank mixes and sequential programs as specified under the tank mix section.

**Preplant Incorporated.** Apply up to 60 days prior to planting and incorporate. **Preemergence.** Apply at planting or up to 2 days after planting. Apply to a firm seedbed free of clods. **DO NOT** make applications preemergence north of Interstate 80, except in the states of Indiana, Michigan and Ohio, or as specified in UPI supplemental labeling.

#### **Use Rates**

# Fall Surface, Fall Incorporated, Preplant Surface, or Preplant Incorporated

Soil Texture	<3% Organic Matter >3%		
Coarse	1.5 pts/A	2.0 pts/A	
Medium	2.5* pts/A	3.0 pts/A	
Fine**	3.0 pts/A	3.0 pts/A	

- \* **DO NOT** exceed 2.1 pts for Southern states; see **Restrictions and Limitations** for map of specific states.
- \*\* For heavy clay soils, apply **Satellite HydroCap herbicide** at the broadcast rate of 3.2 pints per acre.

#### **Preemergence Applications**

Soil Texture	<3% Organic Matter >3%		
Coarse	1.5 pts/A	1.5 pts/A	
Medium	2.0 pts/A	2.0 pts/A	
Fine	2.0 pts/A	2.5 pts/A	

# Preplant Incorporated Applications for Red Rice Control and Itchgrass Suppression

Soil Texture	Up to 3% Organic Matter <sup>1</sup>		
Coarse	3.0 pts/A		
Medium	3.0 pts/A		
Fine	4.0 pts/A		
<sup>1</sup> <b>DO NOT</b> use on soils with more than 3% organic matter.			

#### Restrictions and Limitations

- DO NOT use in soybeans in California.
- Livestock can graze or be fed forage from treated soybean fields.
- **DO NOT** apply within 85 days before harvest.
- DO NOT exceed one application per crop season at the highest rate per acre for any given soil type and application method.

#### **STRAWBERRY**

**Application Methods:** Apply by ground, air, or chemigation.

#### Use Methods, Timings and Use Rates

Stunting, reduced growth, or reduction in daughter plants may occur with this use.

Uniformly apply **1.5 to 3.0 pints per acre** as a broadcast spray to the soil surface at pre-transplant time or post-transplant time (must be within 7 days of transplanting of rootstock in the Pacific Northwest). However,

in geographies where irrigation is used daily (frequently) after transplanting, make the application just before the end of the watering regime to maximize the weed control benefits of **Satellite HydroCap herbicide**. Extended periods of irrigation may reduce the residual control provided by **Satellite HydroCap herbicide**.

Applications to row middles between the beds are allowed. **DO NOT** apply post-transplant if new foliage from rootstock is exposed to spray area. Make a second application of **1.5 to 3.0 pints per acre** of **Satellite HydroCap herbicide** in a band to the soil between crop rows (or between the plastic beds) 35 days before harvest, but **DO NOT CONCENTRATE THE RATE** per acre into the treated area, and **DO NOT** allow spray to contact strawberry plants. The second application rate is based on per unit of treated area.

Apply **Satellite HydroCap herbicide** to strawberries in fall or winter dormancy. Uniformly apply **1.5 to 3.0 pints per acre** as a broadcast spray to the soil surface prior to onset of new seasonal growth from strawberry crowns. **DO NOT** apply if new seasonal growth (leaves) has emerged or is exposed.

Apply **Satellite HydroCap herbicide** to perennial strawberries after renovation. Uniformly apply **1.5 to 3.0 pints per acre** as a broadcast spray to the soil surface after renovation (mowing or other defoliation operation) when no foliage is exposed but prior to onset of new seasonal growth from strawberry crowns. **DO NOT** apply if new seasonal growth (leaves) has emerged or leaves are exposed.

# **Chemigation Applications**

Apply **Satellite HydroCap herbicide** through sprinkler irrigation systems. Follow all directions, special instructions and precautions about chemigation in the Spraying Instructions section of this label. **DO NOT** allow **Satellite HydroCap herbicide**-treated irrigation water to contact strawberry plants.

#### **Use Rates**

Soil Texture	Broadcast Rate	
Coarse	1.5 pts/A	
Medium	2.0 to 2.5 pts/A	
Fine	2.5 to 3.0 pts/A	

#### **Restrictions and Limitations**

- DO NOT apply more than 3.0 pints per acre per application.
- **DO NOT** apply more than 6.0 pints per acre per season.
- **DO NOT** apply within 35 days before harvest.
- DO NOT feed forage or graze livestock in treated fields.
- DO NOT plant lettuce within 6 months after application if the strawberry beds were covered with plastic.

# Additional Use in Oregon and Washington in First Year Nonbearing Strawberries

Uniformly broadcast apply **Satellite HydroCap herbicide** preemergence prior to transplanting strawberries. **DO NOT** harvest for food or feed any portion of the strawberry plant within 1 year (365 days) of **Satellite HydroCap herbicide** application. **DO NOT** apply **Satellite HydroCap herbicide** through any type of irrigation system or by air.

#### **Broadcast Use Rate in First Year Nonbearing Strawberries**

Soil Texture	<3% Organic Matter >3%		
Coarse	1.5 to 2.0 pts/A	2.0 to 3.0 pts/A	
Medium	2.0 to 2.5 pts/A 2.0 to 3.0 pts/		
Fine	2.0 to 3.0 pts/A	2.5 to 3.5 pts/A	

#### **SUGARCANE**

Application Methods: Apply by ground or air.

#### **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** preemergence through layby to plant or ratoon sugarcane. Although there may be adequate crop tolerance for postemergence applications at layby, the spray must be directed under the sugarcane canopy to obtain effective weed control.

#### **Use Rates**

Use Area	Broadcast Rate
All states, except Hawaii	4.2 to 6.2 pts/A
Muck soils (Florida only)	4.2 to 8.4 pts/A
Hawaii	4.2 to 8.4 pts/A

<sup>&</sup>lt;sup>1</sup> Use the high rate if: heavy clay soils; no mechanical incorporation is planned; heavy weed populations are anticipated; itchgrass infestation is anticipated; no shaving is planned.

Additional Use as Fallow Ground Application only in Louisiana. Apply prior to weed germination for control of annual grasses such as itchgrass (Raoulgrass), seedling Johnsongrass and Panicum spp. in preplant fallow ground sugarcane. If necessary, control weeds that have emerged prior to application of **Satellite HydroCap herbicide** with postemergence herbicides and/or mechanical cultivation.

After cultivation and forming the beds in the spring, apply at **2.6 quarts per acre** using ground equipment. Ensure that the sugarcane beds are free of trash or clods at the time of application. If sufficient rainfall (1/2 to 3/4 inch) has not occurred within 7 days of application, perform a shallow incorporation (1 to 2 inches) with an additional pass of a Lilliston-type Lely **Roterra™** cultivator set to cut 2 or 3 inches deep. A minimum interval of 60 days between **Satellite HydroCap herbicide** application and planting of sugarcane is required or crop injury may occur. After planting, apply to sugarcane preemergence through layby, but **DO NOT** exceed 12.5 pints per acre of **Satellite HydroCap herbicide** during one growing season.

Non-cropped Water Drainage Areas Application only in Louisiana. Apply Satellite HydroCap herbicide prior to weed germination to non-irrigated, non-cropped water drainage areas (ditchbanks) adjacent to sugarcane fields. If necessary, control weeds that have emerged prior to application of Satellite HydroCap herbicide with postemergence herbicides and/or mechanical cultivation.

Apply at **2.6 to 3.5 quarts per acre** using ground equipment. **DO NOT** apply below the high water mark or when water is present in the drainage area (ditchbank). **DO NOT** exceed 12.5 pints per acre of **Satellite HydroCap herbicide** during one growing season.

#### **Restrictions and Limitations**

- DO NOT exceed 12.5 pints per acre in one growing season.
- DO NOT use less than 11 gallons of water as a carrier when applying for weed control.
- Ratoon sugarcane must be lightly shaved in early spring to remove the old stubble before incorporation over the line of sugarcane is possible.
   Carefully adjust equipment to incorporate without causing excessive damage to emerging shoots.
- DO NOT make aerial applications at close-in because complete and uniform coverage cannot be obtained.
- **DO NOT** apply through any type of irrigation system.
- DO NOT apply within 90 days before harvest.
- DO NOT graze treated fields or feed treated forage or fodder to livestock.

# **SUNFLOWERS**

Application Methods: Apply by ground or air.

#### **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** preplant incorporated in all states. Fall preplant incorporated applications may be made in Minnesota, North Dakota, and South Dakota only. Apply **Satellite HydroCap herbicide** preemergence in conventional tillage sunflowers, **except in the state of California**.

Plant sunflowers 1-1/2 inches to 2 inches deep and completely cover with soil.

<u>Preplant Incorporated (Spring)</u>. Apply up to 60 days prior to planting and incorporate.

Preplant Incorporated (Fall Applications in North Dakota, South Dakota and Minnesota). Apply and immediately incorporate in late fall prior to planting sunflowers the following spring. Apply in the late fall when soil temperatures are 45° F or below but before the ground freezes. **DO NOT** apply when the air temperature is below 45° F.

Prior to sunflower planting in the spring, make one shallow additional incorporation to fields treated with **Satellite HydroCap herbicide**. Make the spring incorporation at an angle to the last tillage operation.

**Preemergence.** Apply at planting or up to 2 days after planting. Preemergence applications to sunflowers may increase the likelihood of crop injury, especially when sunflowers are grown in stress situations, such as compacted soils. Decreased herbicide performance compared to preplant incorporated applications may also result from a preemergence application. If dry conditions with limited precipitation exist or unseasonably cool temperatures following planting are forecast, apply **Satellite HydroCap herbicide** prior to planting and mechanically incorporate with tillage.

**No-till Sunflowers.** Apply at 3.0 pints per acre up to 30 days before planting (preplant) immediately after planting (preemergence). **DO NOT** use in California.

#### **Use Rates**

#### Preplant Incorporated (Spring) or Preemergence (Conventional Tillage)

		Northern States	
Soil Texture	Southern States <sup>1</sup>	<3% Organic Matter >3%	
Coarse	1.5 pts/A	2.0 pts/A	2.0 pts/A
Medium	2.0 pts/A	2.5 pts/A	3.0 pts/A
Fine	3.0 pts/A	3.0 pts/A	3.0 pts/A
<sup>1</sup> See <b>Restrictions and Limitations</b> for map of specific states.			

#### Preplant Incorporated (Fall) Application<sup>1</sup>

Soil Texture	<3% Organic Matter >3%	
Coarse	2.5 pts/A	2.5 pts/A
Medium	3.0 pts/A	3.5 pts/A
Fine	3.0 pts/A	3.5 pts/A
<sup>1</sup> For use in Minnesota, North Dakota and South Dakota only.		

# Restrictions and Limitations (All Tillage Types)

- DO NOT apply postemergence.
- **DO NOT** feed forage or graze livestock in treated sunflower fields.

# **TOBACCO**

**Application Methods:** Apply with ground equipment only preplant incorporated, or as a layby application in transplanted tobacco.

# **Use Methods, Timings and Use Rates**

**Preplant Incorporated.** Apply with ground sprayer and incorporate up to 60 days prior to transplanting tobacco.

Applied according to directions and under normal growing conditions, **Satellite HydroCap herbicide** will not harm transplanted tobacco. Under stress conditions for plant growth, such as cold/wet or hot/dry weather, **Satellite HydroCap herbicide** can produce a temporary retardation of tobacco development.

**Layby.** Apply as a directed spray following the last normal cultivation (layby), usually 4 to 6 weeks after transplanting tobacco. Apply in a 16-inch to 24-inch band between the crop rows. Contact of the spray solution with tobacco plants may cause damage to the plant.

#### **Use Rates**

#### **Preplant Incorporated Application**

Use Area	Soil Texture	Rate
Florida	Coarse	2.0 pts/A
Georgia	Medium	
Maryland North Carolina	sandy clay loams, loams	2.0 pts/A
South Carolina	silt loams, silts	2.5 pts/A
Virginia	Fine	2.5 pts/A
Other states	Coarse	2.0 pts/A
	Medium	3.0 pts/A
	Fine	3.0 pts/A

#### **Layby Application**

Soil Texture	Broadcast Rate	
Coarse	1.5 pts/A	
Medium	2.0 pts/A	
Fine	2.0 pts/A	

#### **Restrictions and Limitations**

 DO NOT apply as a broadcast spray or contact may cause malformed tobacco leaves.

# **VEGETABLE SOYBEAN (EDAMAME)**

Application Methods. Apply only by ground.

# Use Methods, Timings and Use Rates

Apply **Satellite HydroCap herbicide** to edamame grown under conventional, minimum; or no-till systems.

<u>Preplant Surface.</u> Apply within 15 days of planting. **Satellite HydroCap herbicide** may be applied within 45 days of planting when used in a tank mix or applied sequentially with postemergence-applied herbicides registered for use in edamame.

**Preplant Incorporated.** Apply within 60 days of planting and incorporate. **Preemergence.** Apply at planting or up to 2 days after planting. Apply to a firm seedbed, free of clods. **DO NOT** make applications of **Satellite HydroCap herbicide** preemergence north of Interstate 80, except in states of Indiana, Michigan and Ohio.

#### **Use Rates**

#### Preplant Surface or Preplant Incorporated

Soil Texture	<3% Organic Matter >3%	
Coarse	1.5 pts/A	2.0 pts/A
Medium	2.5* pts/A	3.0 pts/A
Fine**	3.0 pts/A	3.0 pts/A

- \* DO NOT exceed 2.1 pts for Southern states; see **Restrictions and Limitations** for map of specific states.
- \*\* For heavy clay soils, apply **Satellite HydroCap herbicide** at the broadcast rate of 3.2 pints per acre.

#### **Preemergence Applications**

Soil Texture	<3% Organic Matter >3%	
Coarse	1.5 pts/A	1.5 pts/A
Medium	2.0 pts/A	2.0 pts/A
Fine	2.0 pts/A	2.5 pts/A

# **Restrictions and Limitations**

- Livestock can graze or be fed forage from treated vegetable soybean (edamame) fields.
- **DO NOT** apply within 85 days of harvest.
- DO NOT exceed one application per crop season at the highest rate per acre for any given soil type and application method.
- DO NOT use in California.

# WHEAT

**Application Methods:** Apply by ground, air or chemigation.

# **Use Methods, Timings and Use Rates**

Apply **Satellite HydroCap herbicide** postemergence for weed control in fall-seeded, winter-seeded, or spring-seeded wheat or triticale.

Apply to a seedbed which is firm and free of clods and trash. The seedbed **MUST** be prepared to ensure good seed coverage by the soil and seed to soil contact. Use high quality seed. When applications are intended to be made postemergence, plant seed at least 1/2-inch to 1-inch deep to avoid crop injury.

Uniformly apply as a postemergence treatment from the 1st-leaf stage of wheat or triticale until before the flag leaf is visible/emerged for weed control. Apply prior to weed germination. Emerged weeds will not be controlled by this treatment.

For control of established weeds, **Satellite HydroCap herbicide** may be tank mixed with any postemergence herbicide registered for use in wheat or triticale. **Satellite HydroCap herbicide** will provide residual control of the weeds listed in this label. Always perform a mixing test to check the compatibility of **Satellite HydroCap herbicide** with all potential tank mix partners.

#### **Use Rates**

Soil Texture	Southern States <sup>1</sup>	Northern States <sup>1</sup>
Coarse	1.5 to 2.0 pts/A	1.5 pts/A
Medium	1.5 to 3.0 pts/A	1.5 to 2.5 pts/A
Fine	2.0 to 3.0 pts/A	2.0 to 3.0 pts/A
<sup>1</sup> See <b>Restrictions and Limitations</b> for map of specific states.		

In wheat stubble, **Satellite HydroCap herbicide** may be applied in the fall, spring or early summer during the fallow period following wheat harvest as a planned residual treatment to control labeled broadleaf and grass

weeds. Satellite HydroCap herbicide must be applied with an adequate tank mix partner (i.e. glyphosate) to provide control of emerged weeds. There must be at least a 4-month interval between a Satellite HydroCap herbicide fallow application and the rotational planting of any fall-seeded cereal crop. Apply up to, but DO NOT exceed, 3 pints/acre of Satellite HydroCap herbicide in any fallow application. DO NOT make more than one application of Satellite HydroCap herbicide during a single fallow period prior to rotational planting of any fall-seeded cereal crops. Rotational crop restrictions must be adhered to when planting a rotational crop following a fallow application of Satellite HydroCap herbicide.

#### **Restrictions and Limitations**

- DO NOT apply more than 3.0 pints per acre per season.
- DO NOT apply within 60 days before harvest of wheat or triticale grain or straw.
- DO NOT apply within 28 days before harvest of wheat or triticale hay.
- DO NOT apply within 11 days before harvest of wheat or triticale forage.
   NOTE: If loss of grain crop occurs, any crop registered for Satellite HydroCap herbicide preplant incorporated use may be replanted the same year without adverse effects. DO NOT replant wheat or triticale.

#### **Tank Mixes with Other Products**

If this product is used in combination with any other product except as specifically recommended in writing by UPI, then UPI shall have no liability for any loss, damage, or injury arising out of its use in any such combination not so specifically recommended. To the extent consistent with applicable law, if used in combination recommended by UPI, the liability of UPI shall in no manner extend to any damage, loss, or injury not directly caused by the inclusion of the UPI product in such combination use, and in any event shall be limited to return of the amount of the purchase price of the product.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** DO NOT STORE BELOW 15° F. Extended storage at temperatures below 15° F can result in the formation of crystals on the bottom of container. If crystallization does occur, store the container on its side at room temperature (70° F) and rock occasionally until crystals dissolve.

**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 HANDLING: Nonrefillable container. Do not reuse or refill this container.** Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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.

Triple rinse containers too large to shake (capacity ≥ 5 gallons) 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 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.

Refillable Container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of

**Triple rinse as follows:** 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 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

the container. Cleaning before refilling is the responsibility of the refiller.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Do not reuse the container for any other purpose. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. Do not transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

# IMPORTANT INFORMATION READ BEFORE USING PRODUCT

# CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

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