

For Preemergent Weed Control in Turfgrasses, Landscape or Grounds Maintenance, Noncropland Areas and Ornamental Production

ACTIVE INGREDIENT:	
Pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine	38.7%
OTHER INGREDIENTS:	61.3%
TOTAL:	100.0%
(1 gallon contains 3.8 lbs. of microencapsulated pendimethalin in an aqueous carrier.)	

EPA Reg. No. 70506-230

KEEP OUT OF REACH OF CHILDREN 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	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.			
	 Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. 			
	Call a poison control center or doctor for treatment advice.			
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 and Drug Center at 1-866-673-6671.				

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



ACTIVE INCDEDIENT.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS CAUTION

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

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Waterproof gloves
- · Shoes plus socks

Follow manufacturer's instructions 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 should:

- Wash hands thoroughly after handling and 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

This product may have effects on federally listed threatened or endangered plant species or their critical habitat. When using this product, you must follow the measures contained in the Endangered Species Protection bulletin for the county or parish in which you are applying the pesticide. To determine whether your county or parish has a Bulletin, and to obtain the Bulletin, consult https://www.epa.gov/endangered-species, or call 1-844-447-3813 no more than 6 months before using this product. Applicators must use Bulletins that are in effect in the month in which the pesticide will be applied. New Bulletins will generally be available from the above sources 6 months before their effective dates.

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 ASABE 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.

DIRECTIONS FOR USE

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

Do not apply this product through any type of irrigation system.

UPI does not authorize the use of this product in manufacturing, processing or preparing custom blends with other products for application to turf or ornamentals. 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 requirements specific to your state or tribe, consult the state or tribal agency responsible for pesticide regulation.

Do not apply **UP-End HydroCap** in greenhouses, shadehouses or other enclosed structures.

Not for use for commercial seed production.

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 restrictedentry interval (REI) of 24 hours.

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
- Waterproof gloves
- · Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL OR CROP INJURY.

MODE OF ACTION

UP-End HydroCap is a meristematic inhibitor that interferes with the plant cellular division or mitosis and cell elongation in the growing points of shoots and roots of susceptible weeds. When susceptible weeds germinate in the treated area, they contact the herbicide and both shoot and root growth stops. Translocation of the herbicide within the plant is limited. Affected weeds die shortly after growth is stopped, usually before emergence from the soil.

PRODUCT INFORMATION

APPLICATION USE SITES – for preemergence control of grasses and certain broadleaf weed species as they germinate.

Turfgrass sites (golf courses, lawns, sod farms and other turf areas) and landscape ornamental maintenance areas. Such sites include, but are not limited to: grounds or lawns around residential and commercial establishments, multifamily dwellings, military and other institutions, parks, airports,

roadsides, schools, picnic grounds, athletic fields, houses of worship, cemeteries, golf courses, prairie grass areas and sod farms.

Grounds maintenance in areas such as parking lots, driveways and roadsides, alley ways, bike and jogging paths, vacant lots, buildings, stone gardens and gravel yards, markers and fence lines, and mulch beds. It may be used under asphalt or concrete treatments as part of a site preparation program.

Noncropland areas such as railroad, utility, highway, and pipeline rights-of-way, highway guardrails, delineators, and sign posts, bridge abutments and approaches, utility substations, petroleum tank farms, pumping installations, storage areas, fence rows, windbreaks and shelterbelts, paved or gravel surfaces, and established wildflower plantings where weed control is desired.

Bulb plantings, non-bearing fruit and nut tree nurseries, conifer and hardwood seedling nurseries and tree plantations for site preparation and maintenance. Applications can be made on, but are not limited to, plant species listed on this label such as trees, shrubs, groundcovers, perennials, bulbs, ornamental grasses and bedding plants.

In and around field, liner and container ornamental production.

APPLICATION INSTRUCTIONS

UP-End HydroCap will not control established weeds. Therefore, areas to be treated should be free of established weeds at the time of treatment, or use **UP-End HydroCap** together with herbicides registered for postemergence use in managed turf sites, landscape ornamentals and in other noncropland areas. Consult the labels of those herbicides for suggested treatments, rates to be used and precautions or restrictions for use in these areas. The efficacy of **UP-End HydroCap** will be best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If **UP-End HydroCap** is not activated by rainfall or irrigation within 30 days, weed control may be erratic. When applied according to label directions and under normal growing conditions, UP-End HydroCap or UP-End HydroCap tank-mix combinations will not cause crop injury. Over-application can cause crop stand loss, crop injury, or soil residues. Uneven application can decrease weed control or cause crop injury. Seedling diseases, cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought can weaken seedlings and plants, and increase the possibility of plant damage from **UP-End HydroCap**.

MIXING INSTRUCTIONS

UP-End HydroCap 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 **UP-End HydroCap** alone.

When using tank mixtures or sequential applications with **UP-End HydroCap**, 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.

Mixing Instructions

 Fill tank 1/2 to 3/4 full with clean water or liquid fertilizer and agitate. Before mixing UP-End HydroCap or UP-End HydroCap tank mixtures in liquid fertilizer, refer to appropriate label sections for directed uses in liquid fertilizer, application instructions, and compatibility determinations.

2. UP-End HydroCap

When using **UP-End HydroCap** alone, add **UP-End HydroCap** to the partially filled tank while agitating and then fill the remainder of the tank with water or liquid fertilizer.

3. UP-End HydroCap Tank Mixes

Add the tank mixture ingredients in the order listed below before adding **UP-End HydroCap**:

- (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.
- (d) Add UP-End HydroCap 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. Maintain continuous agitation while adding herbicides and until spraying is completed. If the spray mixture is allowed to settle for any period of time, agitate thoroughly to resuspend the mixture before spraying is resumed.

5. BACKPACK SPRAYER

Begin with a clean spray tank. Fill the spray tank one-half full with clean water and add the required amount of **UP-End HydroCap**. Cap sprayer and agitate to ensure mixing. Uncap sprayer and finish filling tank to desired level. Cap sprayer and agitate again. During application it is desirable to agitate the mixture on occasion to ensure mixing. If the spray mixture is allowed to settle for any period of time, agitate thoroughly before spraying is resumed.

6. LIQUID FERTILIZERS

Before mixing, always test small quantities using a simple jar test. Add the required amount of **UP-End HydroCap** to a half filled spray tank while agitating; then add the fertilizer product. Complete filling spray tank to desired level.

SPRAYING INSTRUCTIONS

GROUND APPLICATIONS

Apply with properly calibrated ground equipment in sufficient water per acre to uniformly treat the area, using a spray pressure of 25 to 50 psi. Suggested spray volumes are 20 - 200 gpa for professional turfgrass, landscape and ornamental applications and 10 - 200 gpa for all other noncrop applications such as roadsides, utility rights-of-way or soft-residual bareground applications. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above those listed. Do not apply when winds may cause drift.

Avoid contact of spray solution with driveways, stone, wood, or other porous surfaces. If contact occurs, rinse immediately with water to avoid staining. Do not mechanically scrub until the surface area is thoroughly rinsed. Allow treated turfgrass to dry before entering to avoid staining onto non-treated surfaces.

AERIAL APPLICATIONS

Apply uniformly in 5 or more gallons of water per acre. Take care 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. To avoid overlapping and possible crop injury, use a flagman or an automatic mechanical flagging unit on the aircraft.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops:

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Observe more stringent state regulations. The applicator must be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information presented below.

INFORMATION ON 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 higher 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 lowdrift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Do not apply at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downward. 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. Increase swath adjustment distance with increasing drift potential (higher wind, smaller droplets, etc.).

WIND

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not apply when wind is below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator must 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

Do not apply during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to 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

Apply the pesticide only when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

TABLE 1. RESIDENTIAL, GOLF COURSE, COMMERCIAL AND OTHER NON-RESIDENTIAL TURFGRASS USES

Application Rates For Preemergence Weed Control

	UP-End HydroCap ¹				
		fl. oz.	pints		
Turfgrass Species	Weeds	Product per 1,000 sq. ft.	Product per acre	Comments	
COOL SEASON GRASSE	S				
Bluegrass, Kentucky	Barnyardgrass	All Turf	Uses:	Make a repeat application of 2.2 to	
Fescue, Fine Fescue, Tall	Crabgrass Evening Primrose	1.1 to 1.6 fl. oz.	3.1 to 4.2 pints	3.1 pints/Acre (0.81 to 1.1 fl. oz./ 1,000 sq. ft.) after 5 - 8 weeks for	
Ryegrass, Perennial	1	Initial application before weed	d germination in spring.	extended control or where heavy weed infestations are expected.	
	Goosegrass	Residential and Sod Fa	arm Turf Uses Only ² :	Make a repeat application of	
		1.1 to 1.6 fl. oz.	3.1 to 4.2 pints	3.1 pints/Acre (1.1 fl. oz./1,000 sq. ft.) if the lower rate was used initially or for	
		Golf Course, Commercial and Other Non-Residential Turf Uses Only:		extended goosegrass control after 5 - 8 weeks.	
		1.1 to 2.3 fl. oz.	3.1 to 6.3 pints		
		Initial application before weed	d germination in spring.		

TABLE 1. RESIDENTIAL, GOLF COURSE, COMMERCIAL AND OTHER NON-RESIDENTIAL TURFGRASS USES

Application Rates For Preemergence Weed Control (continued)

		UP-End HydroCap	1		
		fl. oz.	fl. oz. pints		
Turfgrass Species	Weeds	Product per 1,000 sq. ft.	Product per acre	Comments	
COOL SEASON GRASSES	(continued)				
Bluegrass, Kentucky Fescue, Fine Fescue, Tall Ryegrass, Perennial (continued)	Chickweed Corn Speedwell Cudweed Henbit Lawn Burweed	1.1 to 1.6 fl. oz.	3.1 to 4.2 pints	Apply in late summer or early fall before weed germination. Apply a repeat application of 3.1 to 4.2 pints/Acre (1.1 to 1.6 fl. oz./ 1,000 sq. ft.) after 5 - 8 weeks for	
Pontarana or optoblished	Poa annua	All Turf Hose (Non	Croops and Toss).	extended <i>Poa annua</i> control.	
Bentgrass or established Poa annua ³	Barnyardgrass Crabgrass	All Turf Uses (Non-		Make a repeat application of 2.2 to 3.1 pints/Acre (0.81 to 1.1 fl. oz./	
(1/2 inch height or taller)	Evening Primrose Fall Panicum Foxtail Hop Clover Knotweed Poa annua Oxalis Prostrate Spurge Purslane	1.1 fl. oz. Initial application before weed germination in spring.		3.1 pints/Acre (0.81 to 1.1 fl. oz./ 1,000 sq. ft.) after 5 - 8 weeks for extended control or where heavy weed infestations are expected.	
	Goosegrass All Turf Uses (Non-Greens and Tees):		Apply a repeat application of		
		1.1 fl. oz.	3.1 pints	3.1 pints/Acre (1.1 fl. oz./1,000 sq. ft.) for extended goosegrass control afte	
		Initial application before wee	d germination in spring.	5 - 8 weeks.	
	Chickweed	All Turf Uses (Non-	All Turf Uses (Non-Greens and Tees):		
	Corn Speedwell Cudweed Henbit Lawn Burweed Poa annua	1.1 to 1.6 fl. oz.	3.1 to 4.2 pints	before weed germination.	
WARM SEASON GRASSES	<u> </u>				
Bahiagrass	Barnyardgrass	Residential and Sod F	arm Turf Uses Only:	Make a repeat application of 2.2 to	
Bermudagrass	Crabgrass Evening Primrose	1.1 to 1.6 fl. oz.	3.1 to 4.2 pints	3.1 pints/Acre (0.81 to 1.1 fl. oz./	
Buffalograss Centipedegrass Fescue, Tall	Fall Panicum Foxtail	Golf Course, Comr Non-Residential		1,000 sq. ft.) after 5 - 8 weeks if necessary.	
Paspalum, seashore	Hop Clover	1.1 to 2.3 fl. oz.	3.1 to 6.3 pints		
St. Augustinegrass Zoysiagrass	Knotweed Poa annua Oxalis Prostrate Spurge Purslane	Initial application before wee	d germination in spring.		
	Goosegrass	All Turf Uses (Non-	Greens and Tees):	An additional application of	
		1.1 fl. oz.	3.1 pints	3.1 pints/Acre (1.1 fl. oz./1,000 sq. ft.) may be made for extended goosegrass control 8 weeks after the second application.	
		Apply before weed germinati Make a second application a 1,000 sq. ft.) 5 - 8 weeks lat	t 3.1 pints (1.1 fl. oz./		

(continued)

TABLE 1. RESIDENTIAL, GOLF COURSE, COMMERCIAL AND OTHER NON-RESIDENTIAL TURFGRASS USES

Application Rates For Preemergence Weed Control (continued)

	UP-End HydroCap ¹			
		fl. oz.	pints	
Turfgrass Species	Weeds	Product per 1,000 sq. ft.	Product per acre	Comments
WARM SEASON GRASS	ES (continued)			
Bahiagrass	Chickweed	All Turf	Uses:	Apply in late summer or early fall
Bermudagrass Buffalograss Centipedegrass Fescue, Tall Paspalum, seashore St. Augustinegrass Zoysiagrass (continued)	Corn Speedwell Cudweed Henbit Lawn Burweed Poa annua	1.1 to 1.6 fl. oz.	3.1 to 4.2 pints	before weed germination. Make a repeat application of 3.1 to 4.2 pints/Acre (1.1 to 1.6 fl. oz./ 1,000 sq. ft.) 5 - 8 weeks for extended Poa annua control.

¹Do not use more than 4.2 pints (2.1 quarts) per acre per application on residential and sod farm turfgrass.

The efficacy of **UP-End HydroCap** is best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If **UP-End HydroCap** is not activated by rainfall or irrigation within 30 days, weed control may be erratic. To prevent establishment of weeds along the edges of treated area it may be necessary to overlap the spray three to six inches onto sidewalks or driveways, etc., to ensure effective application rates in these especially vulnerable sites. Where temporary discoloration of pavement is undesirable, <u>do not rub or scrub surface</u>, <u>but rinse area immediately using a heavy spray of water to avoid staining</u>. Allow treated turfgrass to dry before entering to avoid staining non-treated surfaces.

TURFGRASS TANK MIXES

UP-End HydroCap can be mixed with postemergence herbicides to control emerged weeds in non-residential turfgrasses. For annual grass control, applications can be made with DRIVE® or MSMA to control emerged weeds.

Broadleaf weeds can be controlled using Trimec, Three Way, 2,4-D and other similar products.

Before tank mixing, perform a simple jar test to insure compatibility of herbicides. Refer to manufacturers' labels for specific use directions, precautions, and limitations before tank mixing with **UP-End HydroCap** and follow those that are most restrictive.

TURFGRASS RESTRICTIONS

- Use on well established turfgrass with a dense and uniform stand. If turf has been thinned or damaged due to winter injury, excessive moisture, etc., allow turf to recover before application.
- On newly planted areas, do not apply until the turfgrass has filled in and has been mowed at least four times. Applications made to overseeded warmseason turfgrasses may cause thinning or injury of the overseeded species.
- Do not use on bentgrass or Poa annua greens and tees or injury may occur.
- Delay reseeding or winter overseeding of treated turfgrass for at least three
 (3) months following the last UP-End HydroCap application.
- Delay sprigging turfgrass for five (5) months after application.

LANDSCAPE AND GROUNDS MAINTENANCE

UP-End HydroCap can be incorporated into landscape and grounds maintenance programs to provide extended preemergence control of most annual grasses and certain broadleaf weeds in areas such as mulch beds, parking areas and roadsides, fencelines and borders, and around statuary or monuments. Ensure that these areas are free of emerged weeds before application.

To remove emerged weeds either cultivate or tank mix **UP-End HydroCap** with a postemergence product labeled for such use.

Not all ornamental species or cultivars of species have been tested for plant safety. Refer to the list of ornamental plant species found in this label. While **UP-End HydroCap** may be used on plant species not listed on this label, a small number of plants should be tested at the specified rate to evaluate suitability before a broad-use application is made.

Refer to **Table 2.** Application Rates for Weed Control in Ornamental Plantings, **Tree Plantations and Other Noncropland Areas**. Avoid contact of spray solution with stone, wood, or other porous surfaces as staining may occur. Rinse surfaces immediately using a heavy spray of water to avoid staining.

ORNAMENTAL PLANTINGS AND TREE PLANTATIONS INCLUDING NONCROPLAND AREAS

Use **UP-End HydroCap** for grounds maintenance in noncropland areas, preemergence control of the weed species listed in and around established tree plantations for site preparation, and maintenance and conifer and hardwood seedling nurseries and pulpwood and fiber farms. **UP-End HydroCap** may be used for hardwood and conifer regeneration on conservation reserve program (CRP) land. **UP-End HydroCap** can also be used in Christmas trees and nonbearing fruit and nutcrops and vineyards established, or bulb and wildflower field plantings, and in and around established ornamentals planted in noncropland areas such as highway rights-of-way and utility substations. Refer to **Table 2. Application Rates for Weed Control in Ornamentals Plantings, Tree Plantations and Other Noncropland Areas**.

Applications at planting or to established trees: When applying at planting, it is important that slit closure be achieved to prevent **UP-End HydroCap** from directly contacting the tree roots or being washed into the root zone via the open slit or root stunting may occur. Refer to section on **Instructions and Restrictions in Landscape and Ornamental Plantings** before making an application.

For postemergence control of weeds, use tank-mix combinations of **UP-End HydroCap** plus VANTAGE®, Roundup®, Finale®, or other labeled herbicides. Refer to approved labeling for species lists. Determine rates for the tank mix compounds from the product labels of both **UP-End HydroCap** and partner herbicides before use. Take care to prevent combination sprays from direct contact with desirable foliage or injury may result. **UP-End HydroCap** plus diuron or simazine combinations will broaden weed control spectrum, however, use of combinations may restrict **UP-End HydroCap** usage in sensitive areas. Refer to manufacturers' labels for specific use directions, precautions, and limitations before use and follow those that are most restrictive.

Do not use more than 6.3 pints (3.1 quarts) per acre per application on golf course turfgrass, commercial or other non-residential turfgrass.

²Residential is defined as turf in any residential situation as well as home lawns, schools, parks and playgrounds.

³ Not for use on bentgrass or *Poa annua* greens or tees.

ORNAMENTAL BULBS

UP-End HydroCap may be applied for control of susceptible annual weeds in ornamental bulbs listed under the Perennial section on the label (crocus, daffodil [narcissus], gladiolus, lilies, tulip, etc.). Apply **UP-End HydroCap** before, during or after bulb emergence. If weeds have already germinated add a labeled postemergence herbicide to control emerged weeds.

WILDFLOWERS

UP-End HydroCap may be applied for control of susceptible annual weeds in plantings of wildflowers listed in the Perennial section on the label. Those perennial species noted (*Black-eyed Susan, California Poppy, Coreopsis, Oxeye Daisy, etc.) have been evaluated for plant tolerance to applications of UP-End HydroCap at 4.2 pints (2.1 quarts) per acre. UP-End HydroCap may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply UP-End HydroCap no sooner than 4 weeks after wildflowers have emerged but before weed germination. If weeds have already germinated, add a labeled postemergence product to control emerged weeds. Refer to all label restrictions before making an application. Due to the diversity of species and varieties which exist in areas where wildflowers are grown, the response to UP-End HydroCap may vary greatly. Test desirable species carefully to determine if area-wide applications can be made.

NON-BEARING FRUIT AND NUT CROPS AND VINEYARDS

UP-End HydroCap may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following non-bearing crops:

Almond	Citrus	Olive	Pistachio
Apple	Fig	Peach	Plum
Apricot	Grape	Pear	Prune
Cherry	Nectarine	Pecan	Walnut, English

NON-CROPLAND WEED CONTROL

Use **UP-End HydroCap** for preemergence control of most annual grasses and certain broadleaf weeds as they germinate on noncropland areas such as railroad, utility, highway, and pipeline rights-of-way, highway guardrails, delineators, and sign posts, utility substations, petroleum tank farms, pumping installations, fence rows, storage areas, windbreaks and shelterbelts.

INDUSTRIAL (UNIMPROVED) TURF

UP-End HydroCap will provide preemergence control of the annual grasses and broadleaf weeds listed in **Weed Species Controlled** section of this label that might germinate in established grasses in rights-of-way, roadsides, construction sites, parks, substations or lots.

Apply before weeds germinate. A postemergence herbicide such as 2,4-D, DRIVE®, VANTAGE®, MSMA, or similar products may be tank mixed to control established weeds. Apply according to label instructions for the respective products and follow the most restrictive wording.

TOTAL VEGETATION CONTROL

UP-End HydroCap may be tank mixed with ARSENAL®, SAHARA®, PLATEAU®, VANTAGE®, Roundup® PRO, Karmex®, Finale®, Oust®, diuron, glyphosate or other products to provide bare ground, or total vegetation control. **UP-End HydroCap** can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank mix partner labels regarding effects on desirable plants. Do not tank mix with ARSENAL, SAHARA or PLATEAU herbicides in California.

Applications may be made to existing weeds controlled by the partner herbicide. Determine rates from the product labels before use. Follow the most restrictive label instructions.

For Kochia control, use a combination of **UP-End HydroCap** with ARSENAL herbicide or diuron if control has been a problem for other herbicides.

TABLE 2. APPLICATION RATES FOR WEED CONTROL IN LANDSCAPE ORNAMENTALS, TREE PLANTATIONS, AND OTHER NONCROP AREAS*

For preemergence control of the weed species listed, apply **UP-End HydroCap** as follows:

Length of Control	Product per Acre	Product per 1,000 sq. ft.
Short Term Control (2 - 4 months)	2.1 Quarts	1.6 fl. oz.
Long Term Control (6 - 8 months)	4.2 Quarts	3.2 fl. oz.

^{*}For all turfgrass weed control rates, refer to **Table 1** instructions.

For extended weed control, repeat applications of **UP-End HydroCap** can be made.

INSTRUCTIONS AND RESTRICTIONS

LANDSCAPE AND ORNAMENTAL PLANTINGS¹

Site	Application Instructions and Restrictions
Landscape Plantings ²	Do not apply to newly-transplanted ornamentals until plants have been watered and soil has been thoroughly packed and settled around roots. Apply as a directed or over-the-top spray. Use the lowest labeled rate when making applications to annuals. Repeat applications can be made for extended landscape weed control.
Ornamental Bulbs ³	UP-End HydroCap may be applied to bulb species listed on the label. Apply before, during or after bulb emergence, but not during bloom.
Wildflowers ³	UP-End HydroCap may be applied in plantings of wildflowers listed on the label. Refer to specific instructions for rate and plant tolerance. For wildflowers being established from seed, apply at 4 weeks after wildflowers have germinated, but before weed seed germination.

¹ Plant only those desirable plant species listed on this label into soil treated the previous season with **UP-End HydroCap** or injury may occur.

HAND-HELD SPRAY EQUIPMENT:

Refer to **Table 2** to determine the amount of **UP-End HydroCap** to be applied per 1,000 square feet, in sufficient water for thorough coverage without runoff. Calibration of backpack or other hand-held equipment will vary with each operator. Determine the amount of water needed to treat 1,000 square feet before mixing the spray solution. Follow information in **MIXING INSTRUCTIONS** section of this label.

UP-End HydroCap will not control established weeds. If weeds germinate before activation of herbicide, shallow cultivate to destroy existing weeds or, where practical, remove by hand. Any necessary cultivation must be shallow. **UP-End HydroCap** may be used together with herbicides registered for postemergence use (i.e. glyphosate or Finale) for the control of established weeds. Do not apply sprays containing glyphosate or Finale over the top of desirable plants. An **UP-End HydroCap** treatment may be followed by any registered herbicide to control weeds not listed on the **UP-End HydroCap** label.

The efficacy of **UP-End HydroCap** will be best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. Erratic weed control may result if **UP-End HydroCap** is not activated by rainfall or irrigation within 30 days.

² Do not treat plants grown for food or feed. Do not use treated plants for food or feed.

³ Before treating a large number of plants, spray a few plants and observe for 1 - 2 months for plant damage before full-scale application.

The following grass and broadleaf weeds are controlled by preemergence treatments of **UP-End HydroCap** at the rates specified in this label:

GRASSES CONTROLLED

Common Name	Scientific Name
Barnyardgrass	Echinochloa crus-galli
Bluegrass, Annual	Poa annua
Crabgrass	Digitaria spp.
Crowfootgrass	Dactyloctenium aegyptium
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, Yellow	Setaria glauca
Goosegrass	Eleusine indica
Itchgrass	Rottboellia exaltata
Johnsongrass (from seed)	Sorghum halepense
Junglerice	Echinochloa colona
Lovegrass (from seed)	Eragrostis spp.
Panicum, Browntop	Panicum fasciculatum
Panicum, Fall	Panicum dichotomiflorum
Panicum, Texas	Panicum texanum
Sandbur, Field	Cenchrus incertus
Signalgrass	Brachiaria platyphylla
Sprangletop, Mexican	Leptochloa uninervia
Sprangletop, Red	Leptochloa filiformis
Witchgrass	Panicum capillare
Woolly Cupgrass	Eriochloa villosa

BROADLEAF WEEDS CONTROLLED

Common Name	Scientific Name
Burweed, Lawn	Soliva pterosperma
Carpetweed	Mollugo verticillata
Chickweed, Common	Stellaria media
Chickweed, Mouseear	Cerastium vulgatum
Clover, Hop	Trifolium procumbens
Cudweed	Gnaphalium spp.
Evening primrose	Oenothera biennis
Fiddleneck	Amsinckia intermedia
Filaree	Erodium spp.
Henbit	Lamium amplexicaule
Knotweed, prostrate	Polygonum aviculare
Kochia	Kochia scoparia
Lambsquarters	Chenopodium album
Pigweed	Amaranthus spp.
Puncturevine	Tribulus terrestris
Purslane	Portulaca oleracea
Pusley, Florida	Richardia scabra
Rocket, London	Sisymbrium irio
Shepherdspurse	Capsella bursa-pastoris
Smartweed, Pennsylvania	Polygonum pensylvanicum
Speedwell, Corn	Veronica arvensis
Spurge, Annual	Euphorbia spp.
Spurge, Prostrate	Euphorbia humistrata
Woodsorrel, Yellow	Oxalis stricta
Velvetleaf (Buttonweed)	Abutilon theophrasti

COMMERCIAL ORNAMENTAL PRODUCTION

USE INFORMATION

Application Use Sites: UP-End HydroCap can be used in and around field, liner and container ornamental production.

UP-End HydroCap sprays may be used around and over the top of the established plants listed in **Table 4** of this label. However, not all varieties or strains of the plant species listed have been tested. Refer to ornamental instructions and restrictions in this label before any application of **UP-End HydroCap**. Unintentional consequences such as crop injury may result because of certain environmental or growing conditions, manner of use or application. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage before full-scale application.

APPLICATION INSTRUCTIONS

UP-End HydroCap will not control established weeds. Therefore, ensure that areas to be treated are free of established weeds at the time of treatment, or **UP-End HydroCap** may be used together with herbicides registered for postemergence use in ornamentals and vegetation control sites. Consult the labels of those herbicides for suggested treatments, rates to be used and precautions or restrictions for use in these areas.

The efficacy of **UP-End HydroCap** will be best if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If **UP-End HydroCap** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Applied according to label directions and under normal growing conditions, **UP-End HydroCap** or **UP-End HydroCap** tank-mix combinations will not cause crop injury. Over-application can result in crop stand loss, crop injury, or soil residues. Uneven application can decrease weed control or cause crop injury.

Seedling diseases, cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought can weaken seedlings and plants, and increase the possibility of plant damage from **UP-End HydroCap**.

SPRAYING INSTRUCTIONS

Apply uniformly with properly calibrated ground equipment in suggested spray volumes of 20 - 200 gpa for ornamental applications to uniformly treat the area with a spray pressure of 25 to 50 psi. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above those specified. Avoid application when winds may cause drift.

Avoid contact of spray solution with driveways, stone, wood, or other porous surfaces. Rinse immediately with water to avoid staining. Avoid mechanically scrubbing until surface area is thoroughly rinsed using a heavy spray of water.

INSTRUCTIONS AND RESTRICTIONS¹ IN PRODUCTION ORNAMENTALS

Do not apply in greenhouses, shadehouses or other enclosed structures.

Site	Application Instructions and Restrictions
Newly-Transplanted Field-Grown Nursery Stock ^{2,3}	Do not make over-the-top applications at time of field transplanting. Use shielded sprayer until plantings have been established for one (1) year or more in the field. Do not apply until transplants have been watered and soil has been thoroughly packed and settled around transplants. Take care to ensure there are no cracks in the soil where UP-End HydroCap could come into contact with the roots. DO NOT apply during bud swell, bud break or at time of first flush of new growth. Direct sprays away from grafted or budded tissue
Newly-Transplanted Container-Grown Nursery Stock ^{2,3}	on transplants at all times. Do not apply until transplants have been watered and soil has been thoroughly packed and settled around transplants. Care must be taken to ensure there are no cracks in the soil where UP-End HydroCap could come into contact with the roots. For container grown ornamentals, delay first application of the product to bareroot liners for two (2) weeks after transplanting. Do not apply during bud swell, bud break or at time of first flush of new growth. Direct sprays away from grafted or budded tissue on transplants at all times.
Established Container, or Field-Grown Nursery Stock ^{2,3}	Do not apply during bud swell, bud break or at time of first flush of new growth. Apply as a directed or over-the-top spray. If newly budded or grafted rootstock, make an application using a shielded sprayer. Take care to ensure there are no cracks in the soil where UP-End HydroCap could come into contact with the roots.
Bare Ground for Container Placement	Apply to soil then water in (including mulch, gravel, wood chips, or other permeable base), replace containerized ornamentals onto pad.

¹ Plant only those desirable plant species listed on this label into soil treated the previous season with **UP-End HydroCap** or injury may occur.

Refer to Table 3. Application Rates for Weed Control in Production Ornamentals.

ORNAMENTAL TANK MIXES

Emerged weeds in ornamentals can be controlled using tank mixes containing VANTAGE®, Roundup®, Finale®, Ornamec®, Gallery®, Princep®, and other similar products. Do not apply sprays containing Roundup or Finale over the top of ornamental plants.

Before tank mixing, perform a simple jar test to insure compatibility of herbicides.

Refer to manufacturers' labels for specific use directions, precautions, and limitations before tank mixing with **UP-End HydroCap** and follow those that are most restrictive.

CHRISTMAS TREE PLANTATIONS

UP-End HydroCap may be used in and around Christmas tree plantations. **UP-End HydroCap** may be applied at planting or to established trees. When making an application at planting, it is important that slit closure be achieved to prevent **UP-End HydroCap** from directly contacting the tree roots or being washed into the root zone via the open slit or root stunting may occur.

For postemergence control of weeds, use tank-mix combinations of UP-End HydroCap plus VANTAGE, Roundup, Finale, or other labeled herbicides. Refer to approved labeling for species information. Determine rates for the tank-mix compounds from the product labels of both UP-End HydroCap and partner herbicides before use. Precaution must be exercised to prevent combination sprays from direct contact with desirable foliage or injury may result. UP-End HydroCap plus diuron or simazine combinations will broaden weed control spectrum; however, use of combinations may restrict UP-End HydroCap usage in sensitive areas. Refer to manufacturers' labels for specific use directions, precautions, and limitations before use and follow those that Refer to Table 3. Application Rates for Weed Control in Production Ornamentals.

VEGETATION CONTROL IN ORNAMENTAL PRODUCTION

UP-End HydroCap may be used for preemergence control of most annual grasses and certain broadleaf weeds as they germinate on noncropland areas such as sign posts, pumping installations, fence rows, storage areas, and windbreaks and shelterbelts. **UP-End HydroCap** may be tank mixed with VANTAGE, Roundup PRO, Karmex®, Finale®, diuron, glyphosate or other products to provide bare ground or total vegetation control, or can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank mix partner labels regarding effects on desirable plants. Applications may be made to existing weeds controlled by the partner herbicide. Determine rates from the product labels before use. Follow the most restrictive label instructions. Refer to **Table 3. Application Rates for Weed Control in Production Ornamentals**.

TABLE 3. APPLICATION RATES FOR WEED CONTROL IN PRODUCTION ORNAMENTALS*

For preemergence control of the weed species listed, apply **UP-End HydroCap** at the following rates:

Length of Control	Product per Acre	Product per 1,000 sq. ft.
Short Term Control (2 - 4 months)	2.1 Quarts	1.6 fl. oz.
Long Term Control (6 - 8 months)	4.2 Quarts	3.2 fl. oz.

^{*}For extended weed control, repeat applications of **UP-End HydroCap** can be made.

HAND-HELD SPRAY EQUIPMENT:

Refer to **Table 3** to determine the amount of **UP-End HydroCap** to be applied per 1,000 square feet. The amount of water used for the application is not critical but should be sufficient for thorough coverage without runoff. Calibration of backpack or other hand-held equipment will vary with each operator. Determine the amount of water needed to treat 1,000 square feet before mixing the spray solution. Follow information in **MIXING INSTRUCTIONS** section of this label.

UP-End HydroCap will not control established weeds. If weeds germinate before activation of herbicide, shallow cultivate to destroy existing weeds or, where practical, remove by hand. Any cultivation must be shallow. **UP-End HydroCap** may be used together with herbicides registered for postemergence use (i.e. Roundup or Finale) for the control of established weeds. Do not apply sprays containing Roundup or Finale over the top of desirable plants. An **UP-End HydroCap** treatment may be followed by any registered herbicide to control weeds not listed on the **UP-End HydroCap** label.

 ²Before treating a large number of plants, spray a few plants and observe for
 1 - 2 months for plant damage before full-scale application.

 $^{^{\}rm 3}$ Do not treat plants grown for food or feed. Do not use treated plants for food or feed.

The efficacy of **UP-End HydroCap** will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. Erratic weed control may result if **UP-End HydroCap** is not activated by rainfall or irrigation within 30 days.

The following grass and broadleaf weeds are controlled by preemergence treatments of **UP-End HydroCap** at the rates specified in this label:

GRASSES CONTROLLED

Common Name	Scientific Name
Barnyardgrass	Echinochloa crus-galli
Bluegrass, Annual	Poa annua
Crabgrass	Digitaria spp.
Crowfootgrass	Dactyloctenium aegyptium
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, Yellow	Setaria glauca
Goosegrass	Eleusine indica
Itchgrass	Rottboellia exaltata
Johnsongrass (from seed)	Sorghum halepense
Junglerice	Echinochloa colona
Lovegrass (from seed)	Eragrostis spp.
Panicum, Browntop	Panicum fasciculatum
Panicum, Fall	Panicum dichotomiflorum
Panicum, Texas	Panicum texanum
Sandbur, Field	Cenchrus incertus
Signalgrass	Brachiaria platyphylla
Sprangletop, Mexican	Leptochloa uninervia
Sprangletop, Red	Leptochloa filiformis
Witchgrass	Panicum capillare
Woolly Cupgrass	Eriochloa villosa

BROADLEAF WEEDS CONTROLLED

Common Name	Scientific Name
Burweed, Lawn	Soliva pterosperma
Carpetweed	Mollugo verticillata
Chickweed, Common	Stellaria media
Chickweed, Mouseear	Cerastium vulgatum
Clover, Hop	Trifolium procumbens
Cudweed	<i>Gnaphalium</i> spp.
Evening primrose	Oenothera biennis
Fiddleneck	Amsinckia intermedia
Filaree	Erodium spp.
Henbit	Lamium amplexicaule
Knotweed, prostrate	Polygonum aviculare
Kochia	Kochia scoparia
Lambsquarters	Chenopodium album
Pigweed	Amaranthus spp.
Puncturevine	Tribulus terrestris
Purslane	Portulaca oleracea
Pusley, Florida	Richardia scabra
Rocket, London	Sisymbrium irio
Shepherdspurse	Capsella bursa-pastoris
Smartweed, Pennsylvania	Polygonum pensylvanicum
Speedwell, Corn	Veronica arvensis
Spurge, Annual	Euphorbia spp.
Spurge, Prostrate	Euphorbia humistrata
Woodsorrel, Yellow	Oxalis stricta
Velvetleaf (Buttonweed)	Abutilon theophrasti

TABLE 4. ORNAMENTAL SPECIES

UP-End HydroCap sprays may be used around and over the top of the established plants listed below. Refer to Ornamental Instructions and Restrictions before application. Refer to **Table 3. Application Rates for Weed Control in Production Ornamentals**.

TREES

THEE	
Common Name	Scientific Name
Alder, European Black	Alnus glutinosa
Apple	<i>Malus</i> spp.
Arborvitae, American	Thuja occidentalis
Arbutus	Arbutus spp.
Ash, Red	Fraxinus pennsylvanica
Ash, White	Fraxinus americana
Aspen, Bigtooth	Populus grandidentata
Aspen, Quaking	Populus tremuloides
Basswood	Tilia spp.
Birch, European Weeping	Betula pendula
Birch, River	Betula nigra
Buckeye, Red	Aesculus pavia
Cedar, White	Thuja occidentalis
Chamaecyparis, Boulevard	Chamaecyparis pisifera
Cherry, Black	Prunus serotina
Cherry, Choke	Prunus virginiana
Cherry, Kwanzan	Prunus serrulata
Cherry, Nanking	Prunus tomentosa
Cottonwood	Populus deltoides
Crabapple	<i>Malus</i> spp.
Crepe Myrtle	Lagerstroemia indica
Cryptomeria, Japanese Cedar	Cryptomeria japonica
Cypress, Bald	Taxodium distichum
Cypress, Leyland	Cupressocyparis leylandii
Dogwood, Flowering	Cornus florida
Dogwood, Korean	Cornus kousa
Dogwood, Silky	Cornus amomum
Dogwood, Shrub	Cornus spp.
Elm	Ulmus japonica
Elm, Winged	Ulmus alata
Eucalyptus (Silver-dollar) tree	Eucalyptus cinerea
Fir, Balsam	Abies balsamae
Fir, Douglas	Pseudotsuga menziesii
Fir, Fraser	Abies fraseri
Fir, White	Abies concolor
Franklinia	<i>Franklinia</i> spp.
Fringe tree	Chlonenthus retusus
Ginkgo	Ginkgo biloba
Gum, Black	Nyssa sylvatica
Gum, Sour	Nyssa sylvatica
Haw, Black	Viburnum prunifolium
Hawthorn	Crataegus spp.
Hemlock, Canada	Tsuga canadensis
Hemlock, Eastern	Tsuga canadensis
Holly, American	llex opaca
Honeylocust	Gleditsia triacanthos
Lilac, Common	Syringa vulgaris
Lilac, Japanese Tree	Syringa reticulata
Linden	Tilia spp.
	opp.

TREES (continued)

Common Name	Scientific Name
Magnolia, Saucer	Magnolia soulangiana
Magnolia, Southern Magnolia, Star	Magnolia grandiflora
Maidenhair Tree	Magnolia stellata
	Ginkgo biloba
Maple, Jonanese	Acer platanoides
Maple, Japanese	Acer palmatum Acer rubrum
Maple, Red Maple, Sugar	Acer rubrum Acer saccharum
Nannyberry, Rusty	Viburnum rufidulum
Oak, Chinquapin	Quercus muehlenbergii
Oak, Live	Quercus virginiana
Oak, Pin	Quercus palustris
Oak, Red	Quercus rubra
Oak, Swamp Chestnut	Quercus michauxii
Oak, Water	Quercus nigra
Oak, White	Quercus nigra Quercus alba
Oak, Willow	Quercus phellos
Olive	Olea europaea
Palm, Date	Phoenix spp.
Palm, Fan	Washingtonia spp.
Palm, Pindo	Butia spp.
Palm, Washington	Washingtonia spp.
Peach	Prunus persica
Pear, Bradford	Pyrus calleryana
roar, Bradiora	'Bradford'
Pecan	Carya illinoensis
Pine, Austrian	Pinus nigra
Pine, Italian Stone	Pinus pinea
Pine, Loblolly	Pinus taeda
Pine, Monterey	Pinus radiata
Pine, Red	Pinus resinosa
Pine, Scotch	Pinus sylvestris
Pine, Virginia	Pinus virginiana
Pine, White	Pinus strobus
Plum, Purple Leaf	Prunus cerasifera
Poplar, Black	Populus nigra
Redcedar, Eastern	Juniperus virginiana
Redcedar, Western	Thuja plicata
Red Ironbark	Eucalyptus sideroxylon
	'Rosea'
Redwood, Dawn	Metasequoia glyptostroboides
Sequoia, Giant	Sequoiadendron giganteum
Serviceberry	Amelanchier laevis
Sourwood	Oxydendrum arboreum
Spruce, Colorado Blue	Picea pungens
Spruce, Dwarf Alberta	Picea glauca 'albertiana'
Spruce, Norway	Picea abies
Spruce, White	Picea glauca
Sweetgum	Liquidambar styraciflua
Sycamore	Platanus occidentalis
Trachycarpus	Trachycarpus spp.
Tulip tree	Liriodendron tulipifera
Walnut, Black	Juglans nigra
Willow, Weeping	Salix babylonica
Yellowwood	Cladrastis lutea

SHRUBS

Common Name	Scientific Name
Abelia, Glossy	Abelia grandiflora
Alder, Witch	Fothergilla gardenii
Aucuba, Gold	Aucuba japonica
Azalea	Rhododendron spp.
Bamboo, Heavenly	Nandina domestica
Barberry	Berberis gladwynensis
Barberry, Japanese	Berberis thunbergii
Blue Indigo Bush	Dalea gregii
Bottlebrush, Lemon	Callistemon citrinus
Boxwood, Common	Buxus sempervirens
Boxwood, Japanese	Buxus microphylla
Brittlebush	Encelia farinosa
Buttonbush	Cephalanthus occidentalis
Camellia	Camellia japonica
Cape Jasmine	Gardenia jasminoides
Cassia, Feathery	Cassia artemisioides
Cordyline	Cordyline spp.
Correa	Correa spp.
Cotoneaster	Cotoneaster apiculatus
Cotoneaster, Bayberry	Cotoneaster dammeri
Cotoneaster, Rock	Cotoneaster horizontalis
Cypress, Italian	Cupressus sempervirens
Cypress, Leyland	Cupressocyparis leylandii
Deutzia, Slender	Deutzia gracilis
Dogwood, Red Twig	Cornus sericea
Elaeagnus	Elaeagnus ebbingei
Escallonia	Escallonia fradesii
Euonymus	Euonymus fortunei
Euonymus, Golden	Euonymus japonica
Euonymus, Winged	Euonymus alata
Firethorn	Pyracantha coccinea
Forsythia, Border	Forsythia intermedia
Fragrant Olive	Osmanthus fragrans
Fuschia, California	Zauschineria californica
Gardenia	Gardenia jasminoides
Hawthorne, Indian	Raphiolepis indica
Hibiscus	Hibiscus syriacus
Holly, Chinese	llex cornuta
Holly, Japanese	llex crenata
Holly, Fosters	llex attenuata 'Fosteri'
Holly, Savannah	llex attenuata
Holly, Yaupon	llex vomitoria
Honeysuckle, Bush	Diervilla lonicera
Hopseed Bush	Dodonaea viscosa
Hopbush	Dodonaea viscosa
Hydrangea	Hydrangea macrophylla
Juniper	<i>Juniperus</i> sp.
Juniper, Chinese	Juniperus chinensis v. pfitzer
Juniper, Shore	Juniperus conferta
Juniper, Trailing	Juniperus horizontalis
_aurel, Cherry	Prunus laurocerasus
_aurel, Mountain	Kalmia latifolia
_aurel, Otto Luyken	Prunus laurocerasus
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SHRUBS (continued)

Common Name	Scientific Name
Laurustinus	Viburnum tinus
Lavender, English	Lavandula angustifolia
Leucothoe	Leucothoe fontanesiana
Leucothoe, Coast	Leucothoe axillaris
Lilac, Cut-leaf	Syringa laciniata
Lily-of-the-Nile	Agapanthus africanus
Mahonia	Mahonia aquifolium
Mock Orange	Pittosporum tobira
Myrtle, Compact	Myrtus communis
Myrtle, Wax	Myrica cerifera
Nandina	Nandina domestica
Oleander	Nerium oleander
Oregon Grape	Mahonia aquifolium
Osmanthus	Osmanthus fragrans
Palm, European Fan	Chamaerops humilis
Palm. Mediterranean Fan	<i>Chamaerops</i> spp.
Phlox, Prickly	Leptodactylon californicum
Photinia, Fraser	Photinia x Fraseri
Pieris, Japanese	Pieris japonica
Pine, Mugo	Pinus mugo
Plum, Natal	Carissa grandiflora
Privet, California	Ligustrum ovalifolium
Privet, Glossy	Ligustrum lucidum
Privet, Variegated	Ligustrum sinensis
Privet, Waxleaf	Ligustrum japonicum
Pyracantha	Pyracantha coccinea
Quince, Flowering	Chaenomeles japonica
Ranger, Texas	Leucophyllum frutescens
Redroot	Ceanothus spp.
Rhododendron	Rhododendron spp.
Robira	Pittosporum tobira
Rose	Rosa spp.
Spice Plant	Illicium parviflorum
Spiraea	Spiraea vanhouttei
Spiraea, Anthony Waterer	Spiraea X bumalda
Spiraea, Japanese	Spiraea japonica
Sweet Bay	Laurus nobilis
Trumpet Bush	Tecoma stans
Verbena, Lemon	Aloysia triphylla
Viburnum	Viburnum suspensum
Vitex	Vitex spp.
Weigela	Weigela florida
Wild Lilac	Ceanothus spp.
Wisteria	Wisteria spp.
Xylosma	• • • • • • • • • • • • • • • • • • • •
Yellowbells	Xylosma congestum Tecoma stans
Yew*	Taxus media
Yew, Japanese*	Taxus cuspidata
Yew, Southern*	Podocarpus macrophyllus
Yucca, Adam's Needle	Yucca filamentosa
Yucca, Weeping	Yucca pendula

 $^{^{\}star}\,\mathrm{Do}$ not apply $\mathbf{UP\text{-}End}$ $\mathbf{HydroCap}$ during spring growth or injury to terminals may occur.

GROUND COVERS

Common Name	Scientific Name
Ajuga	Ajuga reptans
Baby Sun Rose	Aptenia cordifolia
Beach Strawberry	Fragaria chiloensis
Capeweed	Arctotheca calendula
Cinquefoil, Spring	Potentilla verna
Coyotebrush, Dwarf	Baccharis pitularis
Daisy, Trailing African	Osteospermum fruticosum
Dymondia	Dymondia margaretae
Gazania	Gazania splendens
lceplant, Large Leaf	Carpobrotus edulis
lvy, English	Hedera helix
lvy, Geranium	Pelargonium peltatum
Jasmine, Asiatic	Trachelospermum asiaticum
Jasmine, Primrose	Jasminum mesnyi
Jessamine, Carolina	Gelsemium sempervirens
Manzanita, Bearberry	Arctostaphylos uva-ursi
Miscanthus	Miscanthus spp.
Mondograss	Ophiopogon japonica
Morning glory	Convolvulus spp.
Myoporum	Myoporum parviflolium
Pachysandra	Pachysandra terminalis
Potentilla	Potentilla fruticosa
Red Apple	Aptenia cordifolia
Rosemary	Rosmarinus officinalis
Rose-Of-Sharon	Hypericum calycinum
Sand Strawberry	Fragaria chiloensis
Sedum	Sedum spurium
St. Johnswort, Creeping	Hypericum calycinum
Stonecrop	Sedum spurium
Verbena, Peruvian	Verbena peruviana
Vervain	Verbena peruviana
Vetch, Crown	Vicia sativa
Vinca	Vinca minor
Wintercreeper	Euonymous fortunei
DEDENINIAL O	

PERENNIALS

PENEIVINIALS	
Common Name	Scientific Name
Acacia	Acacia redolens
Asparagus	Asparagus spp.
Aster, New York	Aster novi-belgii
Aster, Stokes	Stokesia laevis
Astilibe (False Spirea)	Astilibe spp.
Avens	Geum triflorum
Baby's Breath	Gypsophila elegans
Baby's Breath	Gypsophila paniculata
Beard-Tongue	Penstemon spp.
Bellflower	Campanula spp.
Bellflower, Willow	Campanula persicifolia
Bird of Paradise	Caesalpinia pulcherrima
Black-eyed Susan [†]	Rudbeckia hirta
Blanket Flower [†]	Gaillardia aristata
Blanket Flower [†]	Gaillardia x grandiflora
Bleeding Heart	Dicentra spectabilis
Butterfly Weed	Asclepias tuberosa

PERENNIALS (continued)

PERENNIALS (continued)	
Common Name	Scientific Name
California Poppy	Eschscholzia california
Calla Lily	Zantedeschia aethiopica
Canna, Common Garden	Canna generalis
	'Lucifer'
Carex	Carex spp.
Chincherinchee	Ornithogalum thyrsoides
Clover, Crimson [†]	Trifolium incarnatum
Columbine	Aquilegia
	'McKana Giant'
Columbine	Aquilegia x hybrida
Coreopsis (tickseed) [†]	Coreopsis lanceolata
Crinum Lily	<i>Crinum</i> spp.
Crocus	Crocus spp.
Daffodil	Narcissus spp.
Daylily	Hemerocallis spp.
Fairy Duster	Calliandra eriophylla
Fern, Asparagus	Asparagus officinalis
Fern, Boston	Nephrolepis exaltata
Fern, Hay-scented	Dennstaedtia punctilobula
Fern, Leatherleaf*	Rumohra adiantiformis
Fortnight Lily	Moraea spp.
Foxglove	Digitalis purpurea
Freesia	Freesia x hybrida
Gaillardia	Gaillardia pulchella
Geum	Geum spp.
Gladiolus	Gladiolus spp.
Heather, Dwarf	Calluna vulgaris
Hosta	Hosta spp.
Indian Blanket [†]	Gaillardia pulchella
Iris, Japanese	Iris kaemphera Lantana montevidensis
Lantana, Weeping Leopards Bane	Doronicum cordatum
•	Lillium spp.
Lily Liriope, Big Blue	Liriope muscari
Liriope, Creeping	Liriope muscan Liriope spicata
Liriope, Variegated	Liriope muscari
Moonbeam	Coreopsis verticillata
Montbretia	Crocosmia crocosmiiflora
Mugwort, Western	Artemesia ludoviciana
Nightshade	Solanum spp.
Orchid, Peacock	Acidanthera bicolor
Oxeye Daisy [†]	Chrysanthemum leucanthemum
Palm, Areca	Chysalidocarpus lutescens
Palm, Pygmy Date	Phoenix roebelence
Palm, Washington	Washington robusta
Peony, Chinese	Paeonia lactiflora
Purple Coneflower [†]	Echinacea purpurea
Purple Gay-feather	Liatris pycnostachys
Purple Loosestrife	Lythrum virgatum
Rodgersia	Rodgersia henricie
Rosemary	Rosmarinus officinalis
Sedge	Carex spp.
Shasta Daisy [†]	Chrysanthemum x superbum
Statice	Limonium latifolia
Statice, German	Goniolimon tartaricum

PERENNIALS (continued)

Common Name	Scientific Name
Sweet Flag	Acorus calamus
Tickseed [†]	Coreopsis lanceolata
Texas Bluebonnet	Lupinus texenis
Tulip	<i>Tulipa</i> spp.
Wonder Flower	Ornithogalum thyrsoides
Yarrow [†]	Achillea millefolium
Zephyr Lily	Zephyranthes spp.

^{*} Applications of **UP-End HydroCap** to immature ferns (during periods of new growth of fronds) may result in some injury.

ORNAMENTAL GRASSES

Common Name	Scientific Name
Beach Grass	Ammophila breviligulata
Fescue, Blue	Festuca glauca
Fescue, Sheep	Festuca ovina
Fountain Grass	Pennisetum setaceum
Pampas Grass	Cortaderia selloana
Reed Canary Grass	Phalaris arundinacea
Reed, Giant	Arundo spp.
Ribbon Grass	Phalaris arundinacea
Tufted Hair Grass	Deschampsia caespitosa

BEDDING PLANTS

DEDUNING PLANTS	
Common Name	Scientific Name
Ageratum	Ageratum houstonianum
Alyssum*	Alyssum saxatile
Anemone, Poppy-flowered	Anemone coronaria
Artemesia	Artemesia spp.
Balloonflower	Platycodon grandiflorum
Begonia*	Begonia spp.
Cabbage, Ornamental	Brassica oleracea
Caladium	Caladium spp.
Cast-Iron Plant	Aspidistra elatior
China Aster*	Callistephus chinensis
Crocosmia, Montbretia	Crocosmia x crocosmiiflora
Dahlia*	<i>Dahlia</i> spp.
Dianthus	Dianthus barbatus
Dusty Miller	Senecio cineraria
Gayfeather	<i>Liatris</i> spp.
Gazania, Treasure Flower	Gazania rigens
Gazania, Trailing	Gazania rigens leucolaena
Gloxinia	Gloxinia simningia
Kale, Ornamental	Brassica napus
Marigold, African	Tagetes erecta
Moss Rose*	Portulaca grandiflora
Mum, Garden	Chrysanthemum spp.
Periwinkle*	Vinca major
Periwinkle, Rose	Catharanthus roseus
Petunia*	<i>Petunia</i> spp.
Plumosa Cockscomb	Celosia cristata
Portulaca*	Portulaca grandiflora

[†] These plants have shown tolerance to **UP-End HydroCap** applications of 4.2 pints (2.1 quarts) in wildflower plantings established from seed.

BEDDING PLANTS (continued)

Common Name	Scientific Name
Salvia*	Salvia splendens
Snapdragon	Antirrhinum majus
Statice*	<i>Limonium</i> spp.
Sweet William	Dianthus barbatus
Vinca*	Vinca major

^{*}Do not apply **UP-End HydroCap** sooner than four weeks after transplanting for these annuals. Use the lower labeled rate.

UP-End HydroCap may be used on plant species not listed on this label. Determine the suitability for such uses by treating a small number of such plants at the specified rate. Evaluate treated plants 1 - 2 months following treatment for possible injury.

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. Clean container promptly after emptying. Triple rinse 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.

Containers less than or equal to 5 gallons: triple rinse 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 rinse 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.

Containers larger than 5 gallons: triple rinse 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 it 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.

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